```
078 27364 92836 09428 61208 74982 36498 32764 81276
 986 40932 70987 32123 49817 26346 81287 65491 87364 81
 721 75654 55656 12737 72727 72727 91918 63473 67867 76
 723 87629 37677 32612 53498 71296 28756 18276 98716 87
7269 76329 74698 76857 98670 27601 56701 57601
 591 87364 87265 96710 27630 12673 84769 28743 98127
  8 63298 75698 27465 87326 49876 28376 81273 98615
 367 87432 74328 78674 29867 32867 67867 86786 4326 432
  57 68768 68763 34234 34238 68768 62342 48273 48768 234
 936 98432 32432 86743 43286 43286 43286 43286 43286 432
 743 86743 86743 39867 32867 86743 43286 43286 43243 867
 741 86743 86743 86743 86743 86743 86743 86743 86743 435
 543 98798 98754 98754 98754 98754 29867 67543 67986 867
176 87698 69876 87698 69876 87612 12341 34867 86798 632
 967 43298 65656 56756 56123 32143 14321 32143 14321 321
     12787 58765 76587 58765 76587 58765 76587
                                               58756 765
                 54245 36543 54365 36543-54365
```

Numbers & Oddities a.k.a. The Spooks Newsletter

Edition #212, May 2015

Editor: Ary Boender email: udxf@udxf.nl

Numbers & Oddities http://www.numbersoddities.nl

[&]quot;Numbers & Oddities" a.k.a. the "Spooks Newsletter" is a newsletter for the members of the Utility DXers Forum (UDXF), the Spooks mailing list, HF Underground and everyone else who is interested in Numbers Stations.

[&]quot;Numbers & Oddities" covers the fascinating world of Numbers Stations and other odd radio signals on shortwave.

VOICE STATIONS



14565/16125 kHz, 21-05/22-05, 0500/0600 UTC

460 975 123

36981 66032 20555 17635 41335 54374 36431 74412 44729 32961 55321 88006 55180 31500 48886 07334 45169 27420 54333 43800 73564 99203 59863 92290 59191 38034 81615 09651 42015 97418 30556 42878 92845 85491 92749 24214 57528 29684 71435 75305 46527 68438 64370 87651 05877 49667 74858 71490 30400 40631 79905 90344 05163 78936 03946 23389 86080 19331 71567 22846 55625 55987 37688 58581 14568 24959 18596 67099 95691 16510 72321 47114 10419 51985 01752 68898 64283 04921 78941 89579 02184 71084 14056 91593 69371 17128 17371 86454 99081 62533 27785 51058 62780 74560 06274 88684 43931 80856 17712 31897 21244 29440 49527 29523 72330 50726 40597 84906 33708 01302 18838 37614 78088 94110 70932 05789 94887 44771 92606 31330 84900 88673 92931 975 123 00000

5731 kHz, 22-05, 2130 UTC

315 921 20

14259 22676 32782 32782 76723 89409 12215 74326 64070 90235 38085 59543 12319 74238 36664 12256 18841 73311 98089 12250 921 20 00000



E07

14763/13363/12163 kHz, 03-05/13-05/17-05, 1700/1720/1740 UTC

731 1 252 131

57660 66174 31103 17649 18714 73279 33438 67081 22263 27978 77971 39458 16928 64287 10612 97265 51528 42362 89874 81340 70341 86716 08447 28860 72156 67653 59102 74033 41109 01099 10395 35142 25361 31193 87972 42493 06541 65288 42016 73274 14028 71327 06747 79021 62434 51722 56858 49451 89139 35023 86272 40084 85687 44529 76862 85312 84513 03139 52219 60105 23381 63282 89067 35902 10646 20579 78016 42829 20685 03234 62397 50633 10504 94438 70309 70493 43346 22311 79169 60373 65215 05786 16141 18017 32625 39944 83452 21014 14119 17692 47479 96115 59430 06528 80960 85486 03536 42191 29870 99533 57729 88170 99062 85337 29182 82468 01507 01729 71230 41512 58768 39786 54477 21234 04592 42124 54989 18161 64985 90551 22665 86466 61255 80834 17651 73626 37067 47819 51898 83051 85737 000 000

2

12177 kHz, 16-05, 0800 UTC

148 1 6785 3753 63

02916 71524 67150 52146 71127 87498 53035 90044 02923 94262 74284 15027 58535 26331 24136 32386 81898 30512 26573 76372 88732 84512 40935 43615 77007 97816 95257 39763 79407 83571 64575 90342 83524 35802 53231 20822 38487 86091 18620 01811 54960 04719 46590 32628 49542 11149 95669 80907 29930 54703 74975 59822 50075 68119 51624 21552 89949 17020 84084 71084 44321 53333 81897 000 000



E07a

9266 kHz, 13-05, 2040 UTC

172 1 67279 1848 57

47281 80025 12640 47168 97458 52900 10749 74531 30327 91910 04167 60277 99043 79778 25303 64594 83050 84864 99079 41128 08165 97703 63931 33471 90589 48081 27419 57623 75845 10494 08513 16030 05233 25079 07075 27668 16803 32591 13637 51774 94299 28616 70054 89615 82504 87218 83573 86130 60866 82970 93528 59025 65015 35060 32821 66015 67445 000 000

12182/11082/10182 kHz, 15-05, 1510/1530/1550 UTC

171 1 67875 3753 63

02916 71524 67150 52146 71127 87498 53035 90044 02923 94262 74284 15027 58535 26331 24136 32386 81898 30512 26573 76372 88732 84512 40935 43615 77007 97816 95257 39763 79407 83571 64575 90342 83524 35802 53231 20822 38487 86091 18620 01811 54960 04719 46590 32628 49542 11149 95669 80907 29930 54703 74975 59822 50075 68119 51624 21552 89949 17020 84084 71084 44321 53333 81897 000 000



E11/ E11a

9130 kHz, 03-05, 2005 UTC

369/34 Attention

61340 72492 45717 90453 08825 31990 13932 10896 27381 54064 43558 24242 19163 43276 02771 11622 34817 55057 15770 53155 67473 43729 51135 15264 54346 36355 66606 89814 02662 64463 28365 62428 40936 55811 Attention, rpt msg, out

12924 kHz, 04-05, 0830 UTC

640/33 Attention

84141 43664 24808 19124 96775 96483 25937 27899 00439 07608 45166 30971 00965 99755 66357 86217 68863 06705 98270 75595 57112 26212 95459 20373 59365 92476 78818 01196 15196 70707 82726 02954 67272 Attention, rpt msg, out

16388 kHz, 08-05, 1110 UTC

952/35 Attention

53561 56608 02011 68825 30399 41452 12499 97767 13904 07760

37276 79171 56057 01894 68249 42158 14046 35455 14599 08871

72695 51411 58075 73075 99965 30716 89042 66877 16286 55525

64032 87452 76671 85005 59036

Attention, rpt msg, out

10487 kHz, 08-05, 1710 UTC, sends 31 groups instead of 30

957/30 Attention

45914 93510 01187 89983 38562 55878 03923 14454 64586 29245 48207 56443 87733 40295 82202 30396 43250 49885 05078 99559

58764 26925 74135 44570 58019 69870 97882 97325 64805 99854

60341

Attention, rpt msg, out

12924 kHz, 11-05, 0825 UTC

i.p. 92638 34178 19986 75793 Attention 28914 59105 49804 76719 9 stopped at 0827 UTC.

This is the message sent by POL-FSK at 0800 UTC and probably a simulcast of the E11a message on 9150 UTC at 0820 UTC.

16388 kHz, 11-05, 1110 UTC

952/40 Attention

44499 02781 07702 52628 85686 38173 29826 44263 76892 64919 49568 57772 03036 42634 34259 99583 44972 30372 96190 31124 47847 05506 87340 09519 67324 45954 21083 45676 34212 11008

03938 53164 30319 37239 87166 33269 17436 50324 93700 70959

Attention, rpt msg, out

10487 kHz, 11-05, 1710 UTC

953/30 Attention

62276 75579 77491 03940 49273 77974 54309 91874 52821 26245 39193 96460 26248 59527 61742 22456 12453 90151 71286 93537 01528 00142 18224 90558 51742 91636 70302 18760 88714 38589 Attention, rpt msg, out

13424 kHz, 12-05/14-05, 0645 UTC

512/32 Attention

28713 87884 83956 47036 03880 98309 54796 39383 10710 70435 81223 12028 82657 83923 93099 89169 70043 97963 10576 85402 48986 34247 72991 73071 05985 29260 18169 17517 59976 73714 99837 61724

Attention, rpt msg, out

9150 kHz, 14-05, 0820 UTC

436/30 Attention

28915 59105 49804 76719 99070 25983 17564 58223 98352 65515 52635 82930 54977 74119 52162 20324 97378 34165 15668 92762 54469 54996 14527 00649 93624 72748 92638 34178 29986 75793 Attention, rpt msg, out

10487 kHz, 15-05, 1710 UTC

955/30 Attention

03876 34704 29750 50974 96952 88912 48564 47718 03827 34754 39000 17734 45654 86274 48831 09164 70196 70957 11622 43089 22365 22851 63208 86777 28414 55486 22790 07230 68898 51520 Attention, rpt msg, out

16388 kHz, 18-05, 1110 UTC

952/35 Attention

54051 00411 37223 60519 52773 74294 23115 90146 34143 37420 01766 89605 57102 61427 90938 81222 17675 38073 64220 33327 78620 58177 56932 24582 64257 39095 51403 93531 54053 77142 83424 45989 60571 57054 19654

Attention, rpt msg, out

10487 kHz, 18-05, 1710 UTC

957/24 Attention

99182 43517 84425 98473 98382 66313 86295 67978 16085 24167 04220 67471 54387 07981 23162 75460 90184 09675 90550 52545 22413 15119 85143 78903

Attention, rpt msg, out

9610 kHz, 20-05, 1045 UTC

464/26 Attention

89086 41982 83329 56839 16302 92266 50679 18119 53618 49117 35664 34841 89704 68142 82910 66136 01638 02629 26142 12947 99992 03303 14067 29624 14274 73672 84443 04894 77695 38991 98911 82660 80385 87323 55124 42935

Attention, rpt msg, out

13427 kHz, 25-05, 0900 UTC

532/32 Attention

46620 37562 50386 02546 33815 68195 54751 32571 15023 61009 67649 93789 26751 49992 93792 77382 18824 72704 31575 71582 69524 29505 94777 53033 87640 33220 32262 25386 41409 66601 56023 24123

Attention, rpt msg, out

10487 kHz, 25-05, 1710 UTC

959/30 Attention

94074 36267 73633 07685 49827 19729 00888 94214 40654 62022 02604 18704 72791 94031 84333 38182 25731 21989 99651 60659 78405 56277 99227 61965 69974 72732 08617 10025 61274 90939 Attention, rpt msg, out

15632 kHz, 26-05/28-05, 0745 UTC

330/32 Attention

45264 66426 03403 29003 65149 81070 79997 20198 89937 12048 50022 71456 69023 22669 49434 52040 06966 01699 05866 94347 14272 16831 66883 08796 79011 33930 03887 59402 20720 09681 25954 86400

Attention, rpt msg, out

13424 kHz, 27-05/28-05, 0545 UTC

340/34 Attention

81889 34271 67033 52262 29390 66201 33467 08906 72393 99118 32712 15821 11861 31593 69606 56457 08197 17986 73827 44533 55250 14409 40830 76305 80779 92883 62443 63587 97779 22448 75932 37980 27748 82126

Attention, rpt msg, out

14975 kHz, 27-05, 0805 UTC

311/35 Attention

35335 05797 29308 02116 16834 20521 48093 68335 37207 06888

87108 85495 82241 90706 79608 77403 19583 08488 83398 54913

85452 78341 92524 92406 28499 87766 20323 60050 35761 84210

64661 85083 83898 42488 87679

Attention, rpt msg, out

13427 kHz, 27-05, 0900 UTC

532/32 Attention

46620 37562 50386 02546 33815 68195 54751 32571 15023 61009

67649 93789 26751 49992 93792 77382 18824 72704 31575 71582

69524 29505 94777 53033 87640 33220 32262 25386 41409 66601

56023 24123

Attention, rpt msg, out

14753 kHz, 28-05, 0710 UTC

636/36 Attention

51105 05382 35713 33746 07575 58267 99508 20642 64777 43764

18292 54336 09300 76842 18466 71284 56398 41740 03463 50700

65974 55854 32415 58014 10838 91252 88074 88649 91005 20235

75558 30432 55247 60893 89858 63434

Attention, rpt msg, out

16388 kHz, 28-05, 1110 UTC

952/31 Attention

11873 46999 36582 00791 64310 88548 39695 94153 71716 56787

74460 17267 15148 16715 65475 91214 06571 57156 63474 22701

72464 55595 36704 48335 66861 05669 00204 05175 77811 54172

12585

Attention, rpt msg, out

8088 kHz, 28-05, 1730 UTC

416/38 Attention

75729 54083 59480 26676 56079 06815 24082 57189 82630 16994

02486 60732 25948 83017 57228 36139 55821 68170 25379 56265

18516 58395 14551 67040 15587 35653 77480 21722 43114 81140

19349 58156 71669 10915 35105 42290 45260 87704

Attention, rpt msg, out

10487 kHz, 29-05, 1710 UTC

953/21 Attention

38500 21319 06237 59208 13097 85206 89551 08929 84666 68215

84055 56597 80481 04460 46247 60444 95430 28267 86070 98178

05012

Attention, rpt msg, out

14518 kHz, 02-05, 1810 UTC

982/10 Attention 90033 46550 95139 51575 74446 45921 74969 98924 81132 78278 Attention, rpt msg, out

14518 kHz, 05-05, 1810 UTC

987/10 Attention 00051 22858 83366 52052 20455 46575 25300 25835 92641 52136 Attention, rpt msg, out

13722 kHz, 09-05, 1400 UTC

981/10 Attention 31418 04021 31698 81602 93693 83705 78749 42634 76132 88306 Attention, rpt msg, out

14769 kHz, 16-05, 0530 UTC

984/10 Attention 34282 82992 80816 04292 26132 51574 78399 61045 24897 57644 Attention, rpt msg, out

14518 kHz, 16-05, 1810 UTC

986/10 Attention 41510 08564 27604 88975 08677 06483 01662 96575 75868 19906 Attention, rpt msg, out

13722 kHz, 19-05, 1400 UTC

983/10 Attention 63945 70704 23335 95545 12722 67277 69631 49190 28180 62719 Attention, rpt msg, out

14518 kHz, 19-05, 1810 UTC

988/10 Attention 75902 03682 38788 51452 33790 81347 18687 31595 52759 93503 Attention, rpt msg, out

13722 kHz, 30-05, 1400 UTC

983/10 Attention 88355 32691 69540 91021 34099 12542 22510 34281 26113 23360 Attention, rpt msg, out



16780/12850 kHz, 21-05/28-05, 0800/0810

674 283 5 38352 94289 15244 21541 56567 283 5 00000



6887 kHz, 14-05/28-05, 1830 UTC

842 832 20

37839 35787 98273 60187 16202 95625 31691 52538 61225 22567 93296 67423 40968 16801 63781 34820 04842 60491 75924 04594 832 20 00000

5943 kHz, 15-05/29-05, 1930 UTC

218 832 20

37839 35787 98273 60187 16202 95625 31691 52538 61025 22567 93296 67423 40968 16891 63781 34820 04842 60491 75924 04594 832 20 00000



15721 kHz, 20-05, 0400 UTC

480 393 60

86380 66865 84834 94214 62905 20833 35493 22221 39530 52054 07779 92973 81991 18298 60924 29558 25357 68113 28760 31576 94862 38795 28306 11838 68109 61092 02050 01507 69535 75338 17354 40885 93116 88694 71431 98042 64227 28199 75320 82450 76594 69295 15311 45836 65289 44551 15235 87422 01696 62221 48089 05754 21380 89376 70396 64288 20819 79267 77773 62956 393 60 00000

15721 kHz, 21-05, 0400 UTC

480 617 50

38351 51444 56552 22895 96646 90652 87231 29468 95297 12350 35495 57448 07477 29449 76125 06895 39212 75776 71700 32863 51599 60886 65363 02994 17482 97216 35404 64179 23549 54314 85095 85504 53770 19789 66229 69640 15131 71693 59765 49884 91570 92017 62061 15031 37102 75987 50100 29265 44011 16848 617 50 00000

15721 kHz, 27-05, 0400 UTC

480 315 60

87605 34202 97588 88442 46802 56547 07435 59800 71954 12700 83026 26262 18546 75952 45200 38854 50959 89485 91180 65313 90958 52517 44084 31363 92824 39755 68935 94514 81098 33840 53610 42569 11853 75456 78172 34018 43434 60815 21016 22524 27627 41183 75263 32668 57146 04150 73864 79166 30439 41325 46809 46712 19684 32142 58914 72666 52970 98468 01634 99760 315 60 00000



<u>S06c</u>

14924 kHz, 21-05, 1035 UTC: 11201 (R) off at 1042 UTC

14924 kHz, 21-05, 1050 UTC: 11201 (R)



<u>S06s</u>

12952 kHz, 21-05, 0900 UTC, AM

Test tones at 0900. Late start at 0902. Noisy with feedback. Note that the 0900 UTC sked had ID 624. This should have been 167. 6844 kHz had 167 instead. 167 was sent at 0910 UTC. The id was briefly heard between the noise, the message was unreadable. Message at 0900 UTC: 624 931 5 85258 38303 48833 37437 55584 931 5 00000

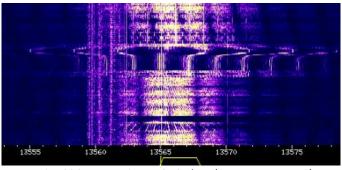
13565 kHz, 21-05, 0910 UTC, AM

Extremely noisy transmitter messed up the message. Carrier up at 0910 UTC, then into a lot of noise. Off at 0918 UTC. The worst case of feedback I have ever heard.

10290/9655 kHz, 22-05, 0920/0930 UTC, AM. Again with mega feedback.

516 243 7 31900 48366 36534 32840 48436 81480 30762 243 7 00000. Again with mega feedback

The recordings are on the N&O website.



Noisy S06s transmitter 13565 kHz (sonogram: Avare)

S06s/E27z uses the old Radio Ukraine International transmitter site in Lviv at 49°53′58.00″N 24°40′52.00″E for its transmissions









<u>S11a</u>

8430 kHz, 08-05, 0915 UTC

484/37 Vnimanie

74863 97273 77630 03075 25948 62528 87041 25906 06732 85570 56802 71637 69622 52816 02891 38334 44359 79441 76406 76906 10749 59438 24600 36879 67634 28008 88032 85065 30159 25234 52389 84075 94622 24554 21186 75431 98454 Vnimanie, rpt msg, konec

11581 kHz, 15-05, 1020 UTC

424/38 Vnimanie

73090 56443 50245 88660 65025 13068 33750 83615 08815 80729

91699 19453 22165 43654 50835 06956 33444 88818 14560 89231

42574 45739 77796 41617 01639 35414 72681 49455 20868 75842

35240 03906 24829 88442 72403 56243 48947 14453

Vnimanie, rpt msg, out

4870 kHz, 15-05, 1955 UTC

372/37 Vnimanie

00763 70970 58830 30174 59394 94758 77418 20696 63184 77095

44926 37406 92940 33832 90002 30155 00950 39878 23553 66444

46168 25095 49222 74851 53442 20090 65668 40047 26948 03561

12295 52482 17071 04596 45929 65966 32341

Vnimanie, rpt msg, konec



S28 - The Buzzer

Mode: USB

Frequency: 3216 & 4625 kHz

04-05, 1030 UTC	MDZhB 69 007 VIKING 3252 1548
04-05, 1032 UTC	MDZhB 57 512 LIKVYeMIN 9650 4388
04-05, 1221 UTC	MDZhB 84 548 MIKAROZA 1933 9932
04-05, 1334 UTC	MDZhB 86 814 KIZYaK 3138 3704
07-05, 1309 UTC	MDZhB 67 363 NIZKIJ 0171 6479
07-05, 1358 UTC	MDZhB 21 754 ZIZIFUS 3611 6021
10-05, 1349 UTC	MDZhB 25 844 LIZIS 2088 3770
10-05, 1434 UTC	MDZhB 01 465 KIZAR 7348 8726
11-05, 1132 UTC	MDZhB 25 271 SIZAL' 3567 7945
11-05, 1350 UTC	MDZhB 72 581 SIDNOKARB 8792 8442
11-05, 1539 UTC	MDZhB 02 002 SIDNOFYeN 3672 9843 VIDAM 6825 9341
13-05, 1241 UTC	MDZhB 76 057 SIGUN 1889 2312 TIGRICA 0431 6916
13-05, 1607 UTC	MDZhB 60 835 BIGOVKA 3221 4908
13-05, 1241 UTC	MDZhB 76 057 SIGUN 1889 2312 TIGRICA 0431 6916
13-05, 1617 UTC	MDZhB 60 835 BIGOVKA 3221 4908
14-05, 0829 UTC	MDZhB 53 632 FIGIT 0938 5499
14-05, 1023 UTC	MDZhB 36 643 MIGALKA 0182 6348
14-05, 1034 UTC	MDZhB 15 230 LIGAZ 4970 8333
14-05, 1520 UTC	MDZhB 14 033 VIVAChYe 7426 9589
16-05, 1207 UTC	MDZhB 22 166 BIBIKA 5451 8953 DIASPOR 2068 1062
17-05, 1244 UTC	MDZhB 90 483 DIAPAUZA 4900 5116
20-05, 1417 UTC	MDZhB 26 051 Chianuri 4077 2921
21-05, 0724 UTC	MDZhB 61 954 PIANOLO 7086 7648
21-05, 0734 UTC	MDZhB 67 574 DIALOMA 3052 5981
21-05, 1415 UTC	MDZhB 82 725 DIAKARB 2953 5627
23-05, 1643 UTC	Inaudible. Short breakdown in Kerro transmitter, Naro-Fominsk site can be heard weak
24-05, 1250 UTC	MDZhB 67 952 VIADUK 4146 6706
24-05, 1337 UTC	Inaudible
28-05, 1403 UTC	MDZhB 68 037 VZYaTOK 5810 7249
28-05, 1458 UTC	MDZhB 87 014 AZURIJ 3711 0328
29-05, 1010 UTC	MDZhB 63 493 VZRYShNIK 2205 6941



S30 - The Pip

Modes: CW (Pip), USB (messages) Frequencies: 3756 kHz (night), 5448 kHz (day)

3756 kHz, 05-05, 1711 UTC	VKY1 HCLF 61HZh ZBIL L7O5 V'Z' NLCE LI27 V2MZ SB7Z
3756 kHz, 06-05, 1816 UTC	5FSShch 8MUO TUZR 5J7Shch DMC3 49FT C2ZA INNC ShchGJP TZLM
3756 kHz, 09-05- 1823 UTC	ZhBZU 4RVZ 3VS' DKJ1 ZhD9V 42BV 81BR M7KS PMV5 L'GJ
5448 kHz, 10-05, 1432 UTC	8S1Shch 37 911 STARICA 2919 6173
3756 kHz, 10-05, 1751 UTC	DEAY JH'J 12CI 79AJ ShchT3O CIHS Z7PM S7ZhG Z'1B CI9V
5448 kHz, 11-05, 0513 UTC	ZhSK4 HZ5T 5FSShch 8MUO TUZR 5J7Shch DMC3 49FT C2ZA INNC
5448 kHz, 11-05, 1538 UTC	8S1Shch 98 972 DRUZhBA 3282 6623. This keyword was used on S32 2 days earlier
5448 kHz, 11-05, 1605 UTC	ShchGJP TZLM FY5E F61N 37CN MUDR 7VNShch Zh7NZh YMA5 VTH3
3756 kHz, 11-05, 1853 UTC	AGDT 'U1B OSOG BO6C F56Shch 9GSA ZhBZI 4RVZ 3VS' DKJ1
3756 kHz, 18-05, 1909 UTC	M7KS PMV5 L'GJ KZI' TShchShchS VKY1 HCLF 61HZh ZBIL L7O5
3756 kHz, 19-05, 1749 UTC	S7ZhG Z'1B Cl9V ZhSK4 HZ5T 5FSShch TUZR 5J7Shch DMC3 49FT
3756 kHz, 21-05, 1854 UTC	JH'J 12CI 79AJ ShchT3O CIHS Z7PM S7ZhG Z'1B CI9V ZhSK4
3756 kHz, 23-05, 1828 UTC	53OB 78MV DEAY JH'J 12CI 79AJ ShchT3O CIHS Z7PM S7ZhG
5448 kHz, 24-05, 1502 UTC	8S1Shch 97 292 BILOS 9757 4111
3756 kHz, 24-05, 1913 UTC	YMA5 VTH3 AGDT 'U1B OSOG BO6C F56Shch 9GSA ZhBZU 4RVZ
3756 kHz, 26-05, 1830 UTC	FY5E F61N Z7CN MUDR 7VNShch Zh7NZh YMA5 VTH3 AGDT 'U1B
3756 kHz, 27-05, 1750 UTC	L7O5 V'Z' NLCE LI27 V2MZ SB7Z 'O6P Y8VM 6I2Zh 8CShchJ
5448 kHz, 28-05, 0507 UTC	27Shch' N1DU 53OB 78MV DEAY JH'J 12CI 79AJ ShchT3O CIHS
5448 kHz, 28-05, 1828 UTC	8S1Shch 04 830 PYeRDYuGA 9506 8264
5448 kHz, 28-05, 1450 UTC	8S1Shch 62 847 PRYeGLYaD 9500 2358



S32 - Squeaky Wheel

Mode: USB

Frequencies: 3838 kHz (night), 7009, 5473 kHz (day)

7009 kHz, 04-05, 1338 UTC	ALFA-45 98 728 MORONAL 6546 1541
7009 kHz, 05-05, 0553 UTC	SLIVA-94 LANDYSh-74 STAZhER-29 ALEUT-09 ZASLONKA-27 KURGAN-40
7009 kHz, 06-05, 1300 UTC	STOROZh-62 NYeVKA-26 KARTA-11 UTYoS-94 KOVBOJ-39
7009 kHz, 07-05, 1312 UTC	ALFA-45 34 009 RUTIL 2122 2042
7009 kHz, 07-05, 1332 UTC	STOROZh-62 NYeVKA-26 KARTA-11 UTYoS-94 KOVBOJ-39 KURGAN-40
7009 kHz, 08-05, 1156 UTC	ALFA-45 18 626 PARALIK 5591 0976
7009 kHz, 09-05, 0914 UTC	RUZh'E-26 BIZON-64 PYeSOChNYJ-21 ShULER-60 PENZA-07 DUBLYoR-68
7009 kHz, 09-05, 1148 UTC	ALFA-45 29 277 GNIL'Ye 5354 3357
7009 kHz, 09-05, 1157 UTC	ALFA-45 07 406 DRUZhBA 9117 5566
7009 kHz, 09-05, 1404 UTC	SLIVA-94 LANDYSh-74 STAZhER-29 ALEUT-09 KURGAN-40 ZASLONKA-27
7009 kHz, 10-05, 0924 UTC	RUZh'E-26 BIZON-64 PYeSOChNYJ-21 ShULER-60 PENZA-07
7009 kHz, 10-05, 1225 UTC	ALFA-45 16 450 OTRYePKI 2400 6663
7009 kHz, 10-05, 1328 UTC	KURGAN-40 DUBLYOR-68 STUPA-32
7009 kHz, 10-05, 1352 UTC	ALFA-45 51 300 ATTYa 1811 4298
7009 kHz, 10-05, 1440 UTC	ALFA-45 61 770 RASIST 5377 3519
7009 kHz, 10-05, 1602 UTC	STOROZh-62 NYeVKA-26 KARTA-11 UTYoS-94 KOVBOJ-39
3828 kHz, 10-05, 1846 UTC	SLIVA-94 LANDYSh-74 STAZhER-29 ALEUT-09 ZASLONKA-27 ROSA-64 DZhIGIT-46 OTPOR-89
	YaHTA-94 FONTAN-34
7009 kHz, 11-05, 0544 UTC	SLIVA-94 LANDYSh-74 STAZhER-29 ALEUT-09 KURGAN-40 ZASLONKA-27
7009 kHz, 11-05, 1221 UTC	ALFA-45 03 189 HINOLIN 9179 0974
7009 kHz, 11-05, 1352 UTC	ALFA-45 46 301 POPIRANIYe 3912 8925
7009 kHz, 11-05, 1357 UTC	RUZh'E-26 BIZON-64 PYeSOChNYJ-21 ShULER-60 PENZA-07 DUBLYoR-68
7009 kHz, 11-05, 1544 UTC	ALFA-45 24 014 OFTAL'MIYa 5957 8488
7009 kHz, 12-05, 0945 UTC	ROSA-64 DZhIGIT-46 OTPOR-89 YaHTA-94 FONTAN-34
7009 kHz, 13-05, 0933 UTC	SLIVA-94 LANDYSh-74 STAZhER-29 ALEUT-09 ZASLONKA-27 DUBLYoR-68
7009 kHz, 13-05, 1248 UTC	ALFA-45 39 886 HABUR 4946 1555

```
7009 kHz, 14-05, 0829 UTC ALFA-45 87 662 STODOLA 8887 4579
7009 kHz, 14-05, 0854 UTC ROSA-64 DZhIGIT-46 OTPOR-89 YaHTA-94 FONTAN-34
7009 kHz, 15-05, 1458 UTC ALFA-45 29 036 TINAKSIT 5466 3211
7009 kHz, 15-05, 1529 UTC
                         ROSA-64 DZhIGIT-46 OTPOR-89 YaHTA-94 FONTAN-34
7009 kHz, 15-05, 1703 UTC SLIVA-94 LANDYSh-74 STAZhER-29 ALEUT-09 ZASLONKA-27
3828 kHz, 15-05, 1935 UTC PYeSOChNYJ-21 ShULER-60 PENZA-07 RUZh'E-26 KURGAN-40 DUBLYOR-68 STUPA-32
7009 kHz, 17-05, 1246 UTC ALFA-45 51 352 TYeLYeSNYJ 0620 7396
7009 kHz, 18-05, 0835 UTC STOROZh-62 NYeVKA-26 KARTA-11 UTYoS-94 KOVBOJ-39
7009 kHz, 18-05, 1226 UTC
                         SLIVA-94 LANDYSh-74 STAZhER-29 ALEUT-09 ZASLONKA-27
7009 kHz, 18-05, 1447 UTC ALFA-45 48 462 LOMShchik 4429 7778
3828 kHz, 18-05, 2009 UTC ALFA-45 89 032 MARKATO 0834 3797
3828 kHz, 18-05, 2019 UTC ALFA-45 06 641 LUAPULA 4171 8134
3828 kHz, 18-05, 2029 UTC ALFA-45 87 858 KOZONOK 8168 2189
3828 kHz, 18-05, 2049 UTC ROSA-64 DZhIGIT-46 OTPOR-89 YaHTA-94 FONTAN-34 KURGAN-40 DUBLYOR-68 STUPA-32
7009 kHz, 19-05, 0557 UTC
                         ROSA-64 DZhIGIT-46 OTPOR-89 YaHTA-94 FONTAN-34 STUPA-32
7009 kHz, 19-05, 0923 UTC RUZh'E-26 BIZON-64 PYeSOChNYJ-21 ShULER-60 PENZA-07 DUBLYOR-68
7009 kHz, 19-05, 1206 UTC ALFA-45 59 501 DITOKS 8292 2200
7009 kHz, 19-05, 1302 UTC SLIVA-94 LANDYSh-74 STAZhER-29 ALEUT-09 ZASLONKA-27 KURGAN-40
7009 kHz, 19-05, 1313 UTC ALFA-45 48 123 STRUKTURA 0616 2294
7009 kHz, 20-05, 0633 UTC ALFA-45 79 130 BARAKCHAN 4562 6658
7009 kHz, 20-05, 0804 UTC ALFA-45 31 037 KALYaGA 7924 4538
7009 kHz, 20-05, 0812 UTC ALFA-45 95 402 BILYeJ 6896 6249
7009 kHz, 20-05, 1334 UTC RUZh'E-26 BIZON-64 PYeSOChNYJ-21 ShULER-60 PENZA-07
7009 kHz, 20-05, 1426 UTC ALFA-45 55 524 KOSTOLOMKA 1859 1623
7009 kHz, 20-05, 1506 UTC ALFA-45 89 086 LIZIMAHIYa 9487 2386
3828 kHz, 20-05, 1902 UTC STOROZh-62 NYeVKA-26 KARTA-11 UTYoS-94 KOVBOJ-39
7009 kHz, 21-05, 0548 UTC SLIVA-94 LANDYSh-74 STAZhER-29 ALEUT-09 ZASLONKA-27 KURGAN-40
7009 kHz, 21-05, 0732 UTC ALFA-45 78 184 LAKIROVShchiK 8497 7768
7009 kHz, 21-05, 0736 UTC ALFA-45 76 637 VITAL'FA 8286 2177
7009 kHz, 21-05, 1407 UTC ALFA-45 89 270 OBLUPA 0235 6395
7009 kHz, 21-05, 1414 UTC ROSA-64 DZhIGIT-46 OTPOR-89 YaHTA-94 FONTAN-34 STUPA-32
7009 kHz, 21-05, 1752 UTC ALFA-45 78 038 SFYeROID 6229 5811
7009 kHz, 22-05, 0753 UTC ALFA-45 94 577 KURIYa 3215 4545
7009 kHz, 22-05, 0837 UTC RUZh'E-26 BIZON-64 PYeSOChNYJ-21 ShULER-60 PENZA-07 DUBLYOR-68
7009 kHz, 22-05, 0857 UTC ALFA-45 77 276 MILOS 5048 4644
7009 kHz, 22-05, 1114 UTC ALFA-45 83 026 POLUMYeTAL 7171 5653
7009 kHz, 22-05, 1907 UTC STOROZh-62 NYeVKA-26 KARTA-11 UTYoS-94 KOVBOJ-39 KURGAN-40 SLIVA-94 LANDYSh-74
                         STAZhER-29 ALEUT-09 ZASLONKA-27
7009 kHz, 23-05, 1025 UTC ALFA-45 53 527 BAJKALIYa 0187 6322
7009 kHz, 23-05, 1209 UTC ALFA-45 01 448 IZMENShchIK 8241 3683
7009 kHz, 23-05, 1248 UTC YaHTA-94 FONTAN-34 STUPA-32 RUZh'E-26 BIZON-64 PYeSOChNYJ-21 ShULER-60 PENZA-07
                         DUBLYoR-68
7009 kHz, 24-05, 1254 UTC ALFA-45 62 687 KAGLYSAL 6074 6179
                         LANDYSh-74 NYeVKA-26 DZhIGIT-46 PYeSOChNYJ-21 KURGAN-40
7009 kHz. 24-05. 1409 UTC
7009 kHz, 24-05, 1505 UTC ALFA-45 57 974 HUNGARA 9038 3532
7009 kHz, 24-05, 1624 UTC ALFA-45 71 372 PARABYeL' 4546 9337
7009 kHz, 25-05, 0531 UTC ALEUT-09 UTYoS-94 KOVBOJ-39 YaHTA-94 PENZA-07 FONTAN-34 ZASLONKA-27
7009 kHz, 25-05, 1000 UTC STUPA-32 STAZhER-29 KARTA-11 OTPOR-89 ShULER-60 DUBLYOR-68 LANDYSh-74
7009 kHz, 25-05, 1026 UTC
                         LANDYSh-74 NYeVKA-26 DZhIGIT-46 PYeSOChNYJ-21 KURGAN-40
7009 kHz, 26-05, 1325 UTC SLIVA-94 STOROZh-62 ROSA-64 RUZh'E-26 BIZON-64
3828 kHz, 26-05, 1025 UTC ALEUT-09 UTYoS-94 KOVBOJ-39 YaHTA-94 PYeNZA-07 STAZhER-29 KARTA-11 OTPOR-89 ShULER-60
7009 kHz, 27-05, 0733 UTC STAZhER-29 KARTA-11 OTPOR-89 ShULER-60 DUBLYOR-68 ZASLONKA-27 STUPA-32 FONTAN-34
3828 kHz, 27-05, 1844 UTC
                         LANDYSh-74 NYeVKA-26 DZhIGIT-46 PYeSOChNYJ-21 KURGAN-40 SLIVA-94 RUZh'E-26
7009 kHz, 28-05, 1406 UTC
                         ALFA-45 83 566 OBOYuDNYJ 4655 4189
7009 kHz, 28-05, 1504 UTC
                         ALFA-45 90 819 BOTROLIT 4786 3286
7009 kHz, 28-05, 1629 UTC
                         STAZhER-29 KARTA-11 OTPOR-89 ShULER-60 DUBLYOR-68 FONTAN-34 LANDYSh-74 NYeVKA-26
                         DZhIGIT-46 PYeSOChNYJ-21 KURGAN-40
5473 kHz, 28-05, 1629 UTC STAZhER-29 KARTA-11 OTPOR-89 ShULER-60 DUBLYOR-68 FONTAN-34 LANDYSh-74 NYeVKA-26
```

DZhIGIT-46 PYeSOChNYJ-21 KURGAN-40

7009 kHz, 29-05, 1117 UTC LANDYSh-74 NYeVKA-26 DZhIGIT-46 PYeSOChNYJ-21 KURGAN-40 SLIVA-94 RUZh'E-26

7009 kHz, 29-05, 1816 UTC ALFA-45 91 391 FYELLO 7908 2372 5473 kHz, 29-05, 1816 UTC ALFA-45 91 391 FYELLO 7908 2372 7009 kHz, 30-05, 1046 UTC ALFA-45 10 245 BISYeRShchIK 1918 1574



S5292

Frequency: 5252 kHz USB

12-05, 1932 UTC Buzzer-marker

19-05, 0757 UTC FAZAN-37 67 482 RAZGON 2819 5839 22-05, 1330 UTC FAZAN-37 36 982 BIOLOG 4326 9675



V02a <u>Dirección General de Inteligencia</u>

7554 kHz, 28-05, 2001 UTC: YL/SS with 5FGs in LSB. Should be M08a at this time. Probably a mistake.



V13 - New Star Broadcasting Station 星星廣播電台 Xīngxīng guǎngbò diàntái

Frequencies: 7654, 7688, 8300, 9276, 9522, 9725, 10182, 10522, 11430, 13750, 15388 kHz

Partly unconfirmed new schedules. Please let us know if you hear the station.

15388 kHz	0200-0230 UTC	New Star 1	11430 kHz	0700-0730 UTC	New Star 4
15388 kHz	0300-0330 UTC	New Star 1	11430 kHz	0800-0830 UTC	New Star 4
15388 kHz	0400-0430 UTC	New Star 2	7502 kHz	1200-1230 UTC	New Star 4
11430 kHz	0500-0530 UTC	New Star 3	7502 kHz	1300-1330 UTC	New Star 4
11430 kHz	0600-0630 UTC	New Star 3			

Logs:

15388 kHz, 30-05, 0800 UTC 15388 kHz, 31-05, 0706 UTC



V21 <u>Cuban Babbler</u>

Heard on 5637 kHz, 15-05, 0030 UTC



V24

Heard on:

5715 kHz, 02-05, 1330 UTC 5715 kHz, 03-05, 1330 UTC 4900 kHz, 03-05, 1500 UTC 5715 kHz, 04-05, 1328 UTC



VC01 - Chinese Robot Chinese Air Defense

Modes: USB and LSB

The station changes its frequencies frequently. Known frequencies:

3036, 3749, 3837, 4075, 4140, 4165, 4175, 4180, 4258, 4343, 4410, 4422, 4427, 4480, 4530, 4580, 4726.5, 5114, 5195, 5232, 5288, 5303, 5328, 5330, 5343, 5393, 5461, 5466, 5471, 5592, 5700, 5740, 5742, 5799, 5802, 5820, 5832, 5892, 6209, 6479, 6771, 6840, 6858, 6860, 6949, 6960, 7090, 7351, 7608, 7684, 7726, 7739, 7744, 7756, 7770, 7792, 7864, 7865, 7880, 7890, 7924, 7938, 8000, 8025, 8046, 8170, 8346, 8779, 9000, 9129, 9169, 9192, 9290, 9340, 10508, 17392 kHz.

Logs:

8046 kHz, 25-05, 1919 UTC Also heard on 5461 kHz LSB and 5466 kHz USB

MORSE STATIONS



MX Russian Military beacons

Current cluster frequencies:

3594, 4558, 5154, 7039/7508, 8495, 10872, 13528, 16332, 20048 kHz

Other frequencies:

- L 6917.5, 8497.8 kHz
- V 3658, 4150, 6809, 6928, 7027.5 kHz
- R 5466 kHz
- W, R, N, G, C, K, Z, L, V, Ü 5620, 5835, 8029, 8112, 8162, 8895 kHz (Tu-Bear net)

Cluster beacon slots:

- .7 "D", Sevastopol
- .8 "P", Kaliningrad
- .9 "S", Severomorsk
- .0 "C", Moscow
- .1 "A", Astrakhan
- .2 "F", Vladivostok
- .3 "K", Petropavlovsk Kamchatskiy
- .4 "M", Magadan

The Russians are using new cluster beacon freqs: 7508.7 D, 7508.9 S, 7509.0 C, replacing the 7039 kHz cluster. The beacons M and F are however still on respectively 7039.4 and 7039.2 kHz.



M01b

5075/5465 kHz, 15-05, 1902 UTC

336 159 38 =

65727 36522 31847 59259 25310 91866 23421 01069 26086 46894 86025 86423 96574 40460 34002 00467 62773 69028 53738 03382 69828 49124 62754 03121 40131 27335 33387 21836 86724 25957 14752 95200 28549 13387 32196 62002 12569 73149 = 159 38 000



<u>M03</u>

7727 kHz, 13-05, 1320 UTC

540/37 = =

60598 81989 68883 75429 04173 22165 35042 03776 46067 69878 90063 51605 48670 51905 16880 80732 69509 37775 57781 55045 02511 80018 02058 80123 74080 12139 71758 46192 42543 46563 33050 73813 51106 68665 81216 66765 11742 = 540/37 = repeat msg = 000

7837 kHz, 21-05/25-05, 1320 UTC

435/38 = =

94181 36974 45579 21958 73302 55493 77417 70448 88549 64516 40895 92829 78648 95886 89101 99166 68676 55095 60039 93345 93015 31575 09256 79782 24386 60945 79541 44963 48310 42830 75563 69370 59651 41786 03120 56558 50536 69013 = 435/38 = repeat msg = 000



<u>M14</u>

18041 kHz, 26-05, 0500 UTC

952 718 718 60 60 = =

76722 76722 88650 88650 57571 57571 62958 62958 76722 76722 47095 47095 72894 72894 29333 29333 48984 48984 60608 60608 41079 41079 57650 57650 48904 48904 58818 58818 59839 59839 63345 63345 03542 03542 96519 96519 37891 37891 38716 38716 92977 92977 41465 41465 27246 27246 85094 85094 05230 05230 01610 01610 25906 25906 95114 95114 91550 91550 92047 92047 42783 42783 46017 46017 76601 76601 59720 59720 49618 49618 89929 89929 53605 53605 23257 23257 08873 08873 52049 52049 09035 09035 24205 24205 04088 04088 72041 72041 26536 26536 71079 71079 00269 00269 05055 05055 64477 64477 65140 65140 14815 14815 97872 97872 46816 46816 58668 58668 84398 84398 44505 44505 60363 60363 30440 30440 46554 46554 49798 49798 = 718 718 60 60 00000





M51 / FAV22 <u>8éme Régiment de</u> <u>Transmission</u>

We received a note from Daniel (Danix) about M51's behaviour. He writes the following:

Interestingly as of late they've been making use of long unused channels, which also includes 9057 kHz from the May 19th/20th TX.

The M51 machine has a new feature that occurs at local midnight (2200 UTC). It sends a long tone. The recording speaks for itself: http://pchq.danix111.com/lol51beep.ogg

Something has changed at CNMO TSR. They seem to have replaced their CW machine with what appears to be a software-based solution. The $+50\pm20$ Hz offset on the Morse is gone.

I listened to today's FAV22 training broadcast (May 22nd) at 1129 UTC. I was very surprised to hear that instead of BT and AR as separate letters, they now emit the actual respective prosigns. There also were other changes:

- Right after the "VVV VVV VVV DE FAV22 FAV22" callup they sent the date and the time: "VENDREDI 22 MAI 2015 11:29 Z"
- Lesson number is now preceded by "NUMÉRO", headers are otherwise of the same format as before

When FAV22 is not up, they are sending randomly chosen FAV22 codé messages without any preambles and separation other than a slightly longer pause. Sometimes they stop for a minute or two, only to restart. I think this is testing of the new system.



M89 <u>Chinese military</u>

Stations and strings:

V A7TR A7TR A7TR DE DI9Q DI9Q

V 5RAB 5RAB 5RAB DE M9AB M9AB

V 7NPE 7NPE 7NPE DE QV5B QV5B

V 6TRW 6TRW 6TRW DE J9NS J9NS

V 7NPE 7NPE 7NPE DE QV5R QV5R (faulty transmission)

V 8CPZ 8CPZ 8CPZ DE XW6W XW6W

V 8DKB 8DKB 8DKB DE ODY8 ODY8

V 8PEX 8PEX 8PEX DE TI5F TI5F

V BNGC BNGC BNGC DE XSV85 XSV85

V BIQ9 BIQ9 BIQQ9 DE ISL2 ISL2

V BRH0 BRH0 BRH0 DE 8NGG 8NGG

V B9SR B9SR B9SR DE AL6R AL6R

V CQ CQ CQ DE DP91 DP91

V CQ CQ CQ DE DP0491 DP4091

V DKG6 DKG6 DE 3A7D 3A7D

V DKSL DKSL DE ALSK ALSK

V DKIL DKIL DE ALSK ALSK (faulty transmission)

V DP9J DP9J DE CQ CQ

V EIOB EIOB EIOB DE JHG2 JHG2

V GKLO GKLO DE TYUI TYUI

V GKN7 GKN7 HKN7 DE F3J5 F3J5

V H2FL H2FL DE DRV8 DRV8

 ${\sf V}\;{\sf JKDJ}\;{\sf JKDJ}\;{\sf JKDJ}\;{\sf DE}\;{\sf SLBC}\;{\sf SLBC}$

V M8JF M8JF DE RIS9 RIS9

V MW3D MW3D MW3D DE 2SLC 2SLC

V N4FM5 N4FM5 N4FM5 DE NAT491 NAT491

V PGG9 PGG9 PGG9 DE MI6Y MI6Y

V RA5J RA5J RA5) DE BP2S BP2S

V RXP7 RXP7 RXP7 DE CZT2 CZT2

V S2LZ S2LZ S2LZ DE YBA6YBA6

V SR3H SR3H SR3H DE FGH8 FGH8 V SXL6 SXL6 SXL6 de 9QFZ 9QFZ

V TKLO TKLO THLO DE TYUI TYUI

V TY9D TY9D TY9D DE EOX2 EPX2

V VTX7 VTX7 VTX7 DE TZ7B TZ7B

V VXL1 VXL1 VXL1 DE XIW2 XIW2

V WZG6 WZG6 WZG6 DE 4VTG 4VTG

V YUQW YUQW YUOQ DE ASDF ASDF

V ZRM7 ZRM7 ZRM7 DE LCM0 LCM0

V N4FM5 N4FM5 N4FM5 DE DUT491 DUT491

V Q5U8 Q5U8 Q5U8 DE 8QPP 8QPP

V QHV8 QHV8 QHV8 de 8QPP 8QPP

VVV Q2M Q2M Q2M DE NYZ NYZ

V DKSL DKSL DE ALSK ALSK

V 3A3J 3A3J 3A3J DE B4ZJ B4ZJ

V HER6 HER6 HER6 DE WU6L WU6L

V BR3S BR3S BR3S DE JU9D JU9D

V DGG6 DGG6 DGG6 DE 3A7D 3A7D (faulty?)

V TY9D TY9D TY9D DE EPX2 EPX2

KDJY DE BEKJ

Messages:

14560 kHz, 03-05, 1111 UTC

N475 U7TU 3565 U7TU NDU6 U77A TND5 (Cont'd)

AR OSL ? K R U 7G GA K R AS

R RPT 38W K R RPT 40W K

R QSL 1925 K R HR WK NR 0015 K

R NIL SK

3521 kHz, 08-05, 2041 UTC

RMKS CQ =

MSG NR MSG NR 1574 CK 61 051609 0430 = RMKS CQ =

.7DU AU.N 6UT4 DTNU N.3D 5NAD ..4U UN3. A45 (Cont'd)

AR AR AR E3S. K K E3SB K K ON 9 ONC9 wк ок KD BACK FACY K K R4CY F4CY K K K

4269 kHz, 10-05, 2002 UTC

MSG GA

NR 263 CK 111 57 0511 0330 RMKS 2410 TO 2090 K = = =

7U4A 6435 7DA5 D743 573T 5DN4 35NN 64UT TT3T TTTD (Cont'd)

AR K NPT K RPT K

R BT 65U4 65U4 AR K BT ATD6 ATD6 K RPT

= 5AU4 5AU4 AR = K

= 567D 567D AR K

R R

5180 kHz, 10-05, 2013 UTC

7T65 3466 5AU3 37TA 6T3D DT6N UN6D (Cont'd)

III = UN74 376D DT3N D.3N D6NT 3NNU 54TD 5D3A TA64 TTU6 (Cont'd) III = UAD6 D4NA 7NT4 A4AU N5A3 33NU 67UN 3N5A TA64 TTU7 (Cont'd)

7602 kHz, 10-05, 1537 UTC

5132 RMKS 512 TO 6790 6240 5180 5160 = SVC GR W 6792 6242 5182 QAW L161000 XP5130 AR

QSL? HR WK NR 28 V DKG6 DE 3A7D

3786 kHz, 15-05, 1610 UTC

0009 = F6J/M1D ARNR 1350/EX 0009 = F6J/M1D AR QSY 04 QSY 04 QSY 04 VVV

4522 kHz, 15-05, 1615 UTC

RPT 49W K

R RPT 49W 7456 7456 K

R OSL 0010 K R HR WK NR .028 K R HR WK NR 0111 K

R NIL SK R HR NIL SK 4673 kHz, 15-05, 1656 UTC

AR K

R RPT 03W = TAND TAND AR K

NR NR 3736 376 EEEE 3730 374 .0K K

ΚP

SK SK SK

5378 kHz, 15-05, 1704 UTC

R R .IEC = = DKFL DKFL K AR

9 REE HR WK NR SHWK NR 51273424 S127 3424 K

R OK GA GA OK GA GA

5635 kHz, 15-05, 1710 UTC

6NDT 475N AU34

AR K R NPT K

R 01W TO 03W = = A5D6 43U6 35AT A5D6 43U6 35AT AR K K

R GA GA R 7G GA CY K K R 7G GA 7G GA CY K K 7G GA CY 7G GA CY K K 7G GA CY 7G GA CY K K 7G GA CY K K

7G GA K 7G GA CY K 7G GA CY K K 7E 7G GA CY K

5500 kHz, 17-05, 2007 UTC

1294/8698

7G 05/CCK CK 25 37 0518 0505 RMKS 8738 TO

1886/1541/1606/1363/1843/1348/1294/8698 K

3TU6 D63A DTN7 7T3N 4D3U 673A D6A4 6NN6 TA7N TTUA DTA5 DA64 NTTA D636 N5T4 N5T3 UN45 4A7T 3TTN DUT6

7T5A 76T7 N75D 7TD4 5TNU AR

8000 kHz, 17-05, 1252 UTC

R QSA 2 QSA? K

R GA K

QSA 2 R HR QSA EEEEEE R

HREGAK

VV 2E5R 2E5I EEEEEE

VV 2EEEEEEE

VV 2F5R 2F5R OSA 2 OSA 2 K

R VV SS4 64 64 R .. F NR NR

VV 2E5R 2E5R DE XD6E XD6E QSA 2 QSA?

HR F GA

AGN AGN AGN AR K

VV VV VV

VV 2E5R 2E4R DE XD6E EEEEE HR MSG GA NR 001/CCK CK EEEEE

3777//4532 kHz, 18-05, 1425 UTC

/18/2255/461/..44/69 AR

UGT COMM = .19/299. /24.. /05/18..255/461/./../69 AR UGT COMM = 719/299. /24. /05/1. /2255/.6. /./44/69 AR 5417 kHz, 18-05, 1717 UTC

AR K

R RPT 01W = A56U AR K R RPT 01W = A56U AR K

R R OK U 7G GA K (Other station found on 5452)

7G GA CY K

R R 7G NR 7040 CK 71 75 0519 0100 RMKS 1843652 TO 1843658 = A47D D7TU 43DA D6AU U4A5 4DTN 357U 46DT 3U56 3TUN T573

AR K

R RPT 33W = 6T5N AR K

R

5452 kHz, 18-05, 1720 UTC

NR 1100 CK 61 42 0519 0100 RMKS 1843658 TO 1843652 AR K

OK =

A3DT U7D4 A56T 64NT 5A67 357U 65A7 U356 5DAN TU3D

AR AR K

RPT 50W = = TADA TADA AR K

RPT 52W RPT 5W = = = 6DUN 6DUN AR = K OK GA (Other station found on 5417) USB USB USB (Switched to USB Voice) 5396 kHz, 18-05, 1711 UTC

AUT3 U4AD 4A5N 3UAT

ΔRΚ

RPT 1W = 47TA AR K R U 7G GA K

7788 kHz, 18-05, 1437 UTC

R5D CQ I EEEEE

7G NR 15

7G/155

7G NR 153/CCK CK 199 03 0518 2000 R59 CQ

EEEEAU

7G NR 15GI 1234567.NT EEEE HEEEEEEEEEEE

7G NR 153

7631 kHz, 19-05, 0218 UTC

3DN4 TN45 743N UDT4 34T7 (Cont)

AR QSL?K

R

AGN AGN

R HR WK NR CJ/57 K

R



UM01 Unid CQ station

3580 kHz, location: Siberia

01-05, 1000 UTC: CQ P 9
01-05, 1042 UTC: CQ P 6
(Transitioning between 5 and 6)
01-05, 2043 UTC: CQ P 5
02-05, 0144 UTC: CQ P 6
02-05, 0210 UTC: CQ P 7
03-05, 1058 UTC: CQ P 12
03-05, 1126 UTC: CQ P 11
03-05, 1350 UTC: CQ P 11
03-05, 1939 UTC: CQ P 6
03-05, 2155 UTC: CQ P 5
03-05, 2342 UTC: CQ P 5
04-05, 0233 UTC: CQ P 8
04-05, 1235 UTC: CQ P 15

04-05, 2042 UTC: CQ P 10
05-05, 0057 UTC: CQ P 9
05-05, 0107 UTC: CQ P 10
06-05, various times. Not heard
07-05, various times. Not heard
08-05, 0943 UTC: CQ P 16
08-05, 1347 UTC: CQ P 17
08-05, 1414 UTC: CQ P 16
08-05. Not heard after 1414 UTC
09-05. Not heard till 2102 UTC
09-05, 2102 UTC: CQ P 17
10-05, 0132 UTC: CQ P 17
10-05, various times. Not heard
12-05, 0955 UTC: CQ P 13

16-05, various times. Not heard 17-05, 1247 UTC: CQ P 19 17-05, 1313 UTC: CQ P 18 17-05, 1247 UTC: CQ P 18 17-05, 1247 UTC: CQ P 17 18-05, 1546 UTC: CQ P 16 18-05, 1708 UTC: CQ P 16 18-05, 2341 UTC: CQ P 13 19-05, 1540 UTC: CQ P 20 26-05, 2346 UTC: CQ P 12 (transitioning between 12 and 11)

26-05, 2346 UTC: CQ P 11 27-05, 0214 UTC: CQ P 13



UM10 <u>Unid 10-minutes net</u>

3314 kHz, 04-05, 2044 UTC: S3DN

3568 kHz, 05-05, 2051 UTC: NZO6 //4064 kHz 3568 kHz, 10-05, 1857 UTC: NZO6 //4064 kHz 3568 kHz, 15-05, 1652 UTC: NZO6 //4064 kHz 3568 kHz, 17-05, 1955 UTC: NZO6 //4064 kHz

3568 kHz, 29-05, 1529 UTC: NZO6

VARIOUS MODES



HM01 Dirección General de Inteligencia

The usual bloopers were noticed during various transmissions. See the Logs Section for all the logs.



HM02

I received the following note from ENIGMA's Brian Rogers.

Following Jim's (JkC) discovery of a daily sched in late April on 7531kHz, transmitting FSK & Morse we have allocated a new designation of HM02 to this station. It is early days & the station is under investigation, but he have produced a profile for the station—which may change in the future. The details are below.

HM02 Assigned 01 May 2015

Hybrid mixed-mode station - possibly variant of Russian Family 1. Consists of FSK transmission followed by a Morse message. A carrier is present on frequency for some time prior to the FSK transmission & has also been reported after the Morse. Uses a single = as separator throughout the message (An unusual feature). Station is currently under investigation - Definition may change.

Current Schedule: At time of writing April / Early May 2015 7351kHz between 0500 - 0600z No fixed time Daily

Morse Format Auto-sent 5 fig Single Grps Using short zero Ends with three long dashes 3 fig call (x1) DK GC(x1) = (5fig single grp msg) = DK GC(Pause 10 --30 secs)
DK GC = (Repeat of msg)DK GC = 000

HM02 logs:

7351 kHz, 08-05, 0515 UTC. I missed the callup sequence

999 867 31 =

83117 64559 46942 56090 43476 21873 52346 94071 39185 78693 02182 44787 07191 23924 19118 73353 46062 96033 04255 74382 65464 43275 63330 05140 78579 01708 30182 76070 64682 81809 23860 =

867 31 867 31 =

83117 64559 46942 56090 43476 21873 52346 94071 39185 78693 02182 44787 07191 23924 19118 73353 46062 96033 04255 74382 65464 43275 63330 05140 78579 01708 30182 76070 64682 81809 23860 =

867 31 000

7351 kHz, 10-05, 0540 UTC

999 329 29 =

02286 97569 76789 44727 77771 92262 75671 35566 68909 34055 08148 19667 37756 90875 89178 75283 26655 09979 54097 47581 60346 25481 76882 95991 78273 67897 94225 36505 75820 = 329 29 329 29 =

02286 97569 76789 44727 77771 92262 75671 35566 68909 34055 08148 19667 37756 90875 89178 75283 26655 09979 54097 47581 60346 25481 76882 95991 78273 67897 94225 36505 75820 = 329 29 000

7351 kHz, 11-05, 0540 UTC

999 146 29 =

57836 55344 40358 79227 92362 05495 90088 95171 16116 74646 91428 11965 88601 54495 56936 29599 49984 41426 17181 80558 73069 16085 10103 69538 53584 01302 97715 35535 96653 = 146 29 146 29 =

57836 55344 40358 79227 92362 05495 90088 95171 16116 74646 91428 11965 88601 54495 56936 29599 49984 41426 17181 80558 73069 16085 10173 69538 53584 01302 97715 35535 96653 = 146 29 000

7351 kHz, 12-05, 0540 UTC

999 497 28 =

35884 90810 54941 75885 93257 94794 00035 14736 49805 37729 03858 55498 66958 73727 29155 27821 03238 41462 32047 75017 66536 96914 75090 69170 54293 17515 67491 76125 = 497 28 497 28 =

35884 90810 54941 75885 93257 9S794 00035 14736 49805 37729 03858 55498 66958 73727 29155 27821 03238 41462 32047 75017 66536 96914 75090 69170 54293 17515 67491 76125 = 497 28 000

7351 kHz, 13-05, 0540 UTC

999 521 30 =

01118 99238 34749 84834 02716 77613 26400 21851 65786 06708 17217 42348 55867 70545 72681 80363 46223 76348 10232 18931 86122 62368 72555 18124 263S3 76266 87155 49032 51143 85498 = 521 30 521 30 =

01118 99238 34749 84834 02716 77613 26400 21851 65786 06708 17217 42348 55867 70545 72681 80363 46223 76348 10232 18931 86122 62368 72555 18124 26343 76266 87155 49032 51143 85498 = 521 30 000

7351 kHz, 14-05, 0540 UTC

999 765 30 =

46103 77661 01170 10484 76766 28696 94913 56457 07357 13794 94434 33975 95557 91539 62499 65S83 78079 73918 79853 22236 14981 69695 80567 15551 82162 19519 93490 61038 20350 33652 = 765 30 765 30 =

46103 77661 01170 10484 76766 28696 94913 56457 07357 13794 94434 33975 95557 91539 62499 65803 78079 73918 79853 22236 14981 69695 80567 15551 82162 19519 93490 61038 20350 33652 = 765 30 000

Not heard after 14 May.

M42 & X06



Modes: Various digital modes, CW, Tones (Мазелка / Mazielka)

Russian Government & Intelligence



M42c - FSK 200/500

15804/13510/11129 kHz, 02-05, 1810/1820/1830 UTC 15804/13510/11129 kHz, 07-05, 1810/1820/1830 UTC 15804/13510/11129 kHz, 09-05, 1810/1820/1830 UTC 10765/8116/5785 kHz, 14-05, 1900/1910/1920 UTC 10765/8116/5785 kHz, 21-05, 1900/1910/1920 UTC 17429/15825/13374 kHz, 23-05, 1200/1210/1220 UTC 15804/13510/11129 kHz, 23-05, 1810/1820/1830 UTC 10765/8116/5785 kHz, 28-05, 1900/1910/1920 UTC 17429/15825/13374 kHz, 30-05, 1200/1210/1220 UTC

RYRYRY 00000++++++++162)5761
RYRYRY 00000+++++++162)5761
RYRYRY 00000+++++++162)5761
RYRYRY 00000+++++++162)5761
RYRYRY 00000+++++++162)5761
RYRYRY 00000+++++++162)5761
RYRYRY 00000++++++++162)5761
RYRYRY 00000++++++++162)5761
RYRYRY 00000+++++++++162)5761

M42d - FSK 200/1000

11161/9269 kHz, 01-05, 0700/0710 UTC

Block No 0: Total Message Size 4 blocks: This transmission contains one message.

Block No 1: Link ID 45136: 1st of month: Msg Number 162: Msg Type 07145: Group Count (?) 4

32620 00000 00000 03994 55182 34911 00893 09725

19137/16352/14611 kHz, 02-05, 1100/1110/1120 UTC

Block No 0 : Total Message Size 13 blocks : This transmission contains one message.

Block No 1: Link ID 36882: 29th of month: Msg Number 032: Msg Type 07145: Group Count (?) 74

15661 11362 26675 15868 31234 36107 13108 40646

11161/9269/7530 kHz, 03-05, 0700/0710/0720 UTC

Block No 0: Total Message Size 39 blocks: This transmission contains one message.

Block No 1: Link ID 45136: 30th of month: Msg Number 225: Msg Type 07145: Group Count (?) 255

43317 04326 26050 26785 58024 00568 57042 04750

11161/9269/7530 kHz, 06-05, 0700/0710/0720 UTC

Block No 0: Total Message Size 38 blocks: This transmission contains one message.

 $Block\ No\ 1\ : Link\ ID\ 45136\ : 5th\ of\ month\ : Msg\ Number\ 232: Msg\ Type\ 07145: Group\ Count\ (?)\ 253$

64844 23601 49706 04993 58024 33067 01650 32415

17428/15812/13485 kHz, 06-05, 1230/1240/1250 UTC

Block No 0: Total Message Size 4 blocks: This transmission contains one message.

Block No 1: Link ID 53277: 6th of month: Msg Number 002: Msg Type 07145: Group Count (?) 4

39180 00000 00000 03177 15966 35272 00893 36360

15812/13409/11144 kHz, 07-05, 1330/1340/1350 UTC

Block No 0 : Total Message Size 4 blocks : This transmission contains one message.

Block No 1: Link ID 49237: 7th of month: Msg Number 015: Msg Type 07145: Group Count (?) 4

59148 00000 00000 02506 54891 02727 00893 24798

11161/9269/7530 kHz, 08-05, 0700/0710/0720 UTC

Block No 0: Total Message Size 4 blocks: This transmission contains one message.

Block No 1: Link ID 45136: 8th of month: Msg Number 195: Msg Type 07145: Group Count (?) 4

39256 00000 00000 00148 55182 00356 00893 41999

17481/15826/13418 kHz, 10-05, 0800/0810/0820 UTC

Block No 0: Total Message Size 19 blocks: This transmission contains one message.

Block No 1: Link ID 45115: 7th of month: Msg Number 020: Msg Type 07145: Group Count (?) 114

01076 33425 14160 24751 07039 03019 20351 65535

17424/15816/13394 kHz, 10-05, 0900/0910/0920 UTC

Block No 0: Total Message Size 15 blocks: This transmission contains one message.

Block No 1: Link ID 45057: 7th of month: Msg Number 177: Msg Type 07145: Group Count (?) 91

18908 62726 43331 05507 49814 33881 17569 44259

16352/14611 kHz, 10-05, 0920/0930 UTC

Block No 0: Total Message Size 13 blocks: This transmission contains one message.

Block No 1: Link ID 36882: 7th of month: Msg Number 035: Msg Type 07145: Group Count (?) 76

29820 09443 53531 14878 28573 02976 03202 47905

11161/9269/7530 kHz, 11-05, 0700/0710/0720 UTC

Block No 0: Total Message Size 44 blocks: This transmission contains one message.

Block No 1: Link ID 45136: 8th of month: Msg Number 240: Msg Type 07145: Group Count (?) 41

23236 23353 44593 36844 65099 04476 58617 26830

10521/8127/6945 kHz, 11-05, 1200/1210/1220 UTC

Block No 0: Total Message Size 44 blocks: This transmission contains one message.

Block No 1: Link ID 45136: 8th of month: Msg Number 240: Msg Type 07145: Group Count (?) 41

23236 23353 44593 36844 65099 04476 58617 26830

15836/13424 kHz, 11-05, 1540/1550 UTC

Block No 0: Total Message Size 21 blocks: This transmission contains one message.

Block No 1: Link ID 20501: 7th of month: Msg Number 122: Msg Type 07145: Group Count (?) 130

42124 38089 23621 18860 32012 33717 17968 13940

19607/17459/15921 kHz, 12-05, 1400/1510/1420 UTC

 $Block\,No\,O: Total\,Message\,Size\,4\,blocks: This\,transmission\,contains\,one\,message.$

Block No 1: Link ID 32799: 12th of month: Msg Number 090: Msg Type 07145: Group Count (?) 4

 $55564\ 00000\ 00000\ 02214\ 09187\ 02948\ 00893\ 57191$

17434/15787/13374 kHz, 12-05, 1650/1700/1710 UTC

Block No 0: Total Message Size 4 blocks: This transmission contains one message.

Block No 1: Link ID 20501: 12th of month: Msg Number 140: Msg Type 07145: Group Count (?) 4

19140 00000 00000 01044 16418 01661 00893 21263

11427/9254/7689 kHz, 12-05, 2100/2110/2120 UTC

Block No 0: Total Message Size 4 blocks: This transmission contains one message.

Block No 1: Link ID 45057: 12th of month: Msg Number 007: Msg Type 07145: Group Count (?) 4

50980 00000 00000 02434 38644 35581 00893 07692

11161/9269/7530 kHz, 13-05, 0700/0710/0720 UTC

Block No 0 : Total Message Size 1 blocks : This transmission contains 0 messages.

Block No 1: Link ID 45136: 12th of month: Msg Number 247: Msg Type 07145: Group Count (?) 229

 $31976\ 41536\ 23722\ 33628\ 55182\ 35640\ 45059\ 31440$

15991/13579/11492 kHz, 13-05, 0800/0810/0820 UTC

Block No 0: Total Message Size 4 blocks: This transmission contains one message.

Block No 1: Link ID 45075: 13th of month: Msg Number 205: Msg Type 07145: Group Count (?) 4

36716 00000 00008 03903 63487 51695 02943 65535

11161/9269/7530 kHz, 14-05, 0700/0710/0720 UTC

Block No 0: Total Message Size 50 blocks: This transmission contains 2 messages.

Block No 1: Link ID 45136: 13th of month: Msg Number 002: Msg Type 07145: Group Count (?) 165

53100 58739 47188 08529 58024 34849 25897 52420

7530 kHz, 15-05, 0720 UTC

Block No 0: Total Message Size 4 blocks: This transmission contains 0 messages.

Block No 1: Link ID 45137: 15th of month: Msg Number 052: Msg Type 07145: Group Count (?) 4

03896 00000 00000 01261 01146 35287 00893 49475

18749/16172/14561 kHz, 16-05, 2100/2110/2120 UTC

Block No 0: Total Message Size 4 blocks: This transmission contains one message.

Block No 1: Link ID 32821: 16th of month: Msg Number 052: Msg Type 07145: Group Count (?) 4

39180 00000 00000 02709 13740 34271 00893 16858

17431/15836/13424 kHz, 17-05, 1530/1540/1550 UTC

Block No 0: Total Message Size 27 blocks: This transmission contains one message.

Block No 1: Link ID 20501: 15th of month: Msg Number 125: Msg Type 07145: Group Count (?) 174

60112 39369 09163 18868 12857 02969 33879 54348

11161/9269/7530 kHz, 18-05, 0700/0710/0720 UTC

Block No 0: Total Message Size 36 blocks: This transmission contains one message.

Block No 1: Link ID 45136: 15th of month: Msg Number 007: Msg Type 07145: Group Count (?) 233

33348 38435 16538 38338 58024 36595 33913 10594

6945 kHz, 18-05, 1220 UTC

Block No 0: Total Message Size 18 blocks: This transmission contains 0 messages.

Block No 1: Link ID 45136: 15th of month: Msg Number 007: Msg Type 07145: Group Count (?) 233

33380 38435 16538 38338 58024 36595 33913 10594

11161/9269/7530 kHz, 19-05, 0700/0710/0720 UTC

Block No 0: Total Message Size 68 blocks: This transmission contains 2 messages.

Block No 1 : Link ID 45137 : 18th of month : Msg Number 010 : Msg Type 07145 : Group Count (?) 103

11756 60709 04284 10556 07583 00286 54525 36939

17459/15921 kHz, 19-05, 1410/1420 UTC

Block No 0: Total Message Size 27 blocks: This transmission contains one message.

Block No 1: Link ID 32799: 15th of month: Msg Number 090: Msg Type 07145: Group Count (?) 174

21964 09860 56559 35355 29865 03096 12513 57243

17435/15789/13376 kHz, 19-05, 1650/1700/1710 UTC

Msg NR140/15th Type 07145 GR174 on Link 20501

27092 32274 05069 13340 32012 02476 13506 08217

11161/9269/7530 kHz, 20-05, 0700/0710/0720 UTC

Block No 0: Total Message Size 42 blocks: This transmission contains one message.

Block No 1: Link ID 45137: 19th of month: Msg Number 015: Msg Type 07145: Group Count (?) 27

13732 37248 57352 08880 07583 08153 39725 06983

15991/13579/11429 kHz, 20-05, 0800/0810/0820 UTC

Block No 0: Total Message Size 4 blocks: This transmission contains one message.

Block No 1: Link ID 45075: 20th of month: Msg Number 140: Msg Type 07145: Group Count (?) 4

53756 00000 00000 03900 19299 03103 00893 57046

10521/8127/6945 kHz, 20-05, 1200/1210/1220 UTC

Block No 0: Total Message Size 42 blocks: This transmission contains one message.

Block No 1: Link ID 45137: 19th of month: Msg Number 015: Msg Type 07145: Group Count (?) 27

 $13732\ 37248\ 57352\ 08880\ 07583\ 08153\ 39725\ 06983$

17428/15812/13485 kHz, 20-05, 1230/1240/1250 UTC

Block No 0: Total Message Size 4 blocks: This transmission contains one message.

Block No 1: Link ID 61759: 20th of month: Msg Number 224: Msg Type 08171: Group Count (?) 12

36732 04369 00256 03196 32511 04091 06143 65534

17434/15787/13374 kHz, 20-05, 1650/1700/1710 UTC

Block No 0 : Total Message Size 27 blocks : This transmission contains one message.

Block No 1: Link ID 20501: 15th of month: Msg Number 140: Msg Type 07145: Group Count (?) 174

27092 32274 05069 13340 32012 02476 13506 08217

11161/9269/7530 kHz, 21-05, 0700/0710/0720 UTC

Block No 0: Total Message Size 57 blocks: This transmission contains 2 messages.

Block No 1: Link ID 45136: 20th of month: Msg Number 017: Msg Type 07145: Group Count (?) 183

17896 25607 12951 13527 55182 34726 47611 48338

10521/8127/6945 kHz, 21-05, 1200/1210/1220 UTC

Block No 0: Total Message Size 57 blocks: This transmission contains 2 messages.

Block No 1: Link ID 45136: 20th of month: Msg Number 017: Msg Type 07145: Group Count (?) 183

17896 25607 12951 13527 55182 34726 47611 48338

16187/14406/12189 kHz, 22-05, 0600/0610/0620 UTC

Block No 0: Total Message Size 77 blocks: This transmission contains one message.

Block No 1: Link ID 40988: 19th of month: Msg Number 127: Msg Type 07145: Group Count (?) 17

64396 10532 17078 40710 00624 43504 60328 32325

11161/9269/7530 kHz, 22-05, 0700/0710/0720 UTC

Block No 0: Total Message Size 4 blocks: This transmission contains one message.

Block No 1: Link ID 45137: 22nd of month: Msg Number 112: Msg Type 07145: Group Count (?) 4

07380 00000 00000 00951 01146 36684 00893 00332

17481/15826/13418 kHz, 23-05, 0800/0810/0820 UTC

Block No 0: Total Message Size 19 blocks: This transmission contains one message.

Block No 1: Link ID 45115: 7th of month: Msg Number 020: Msg Type 07145: Group Count (?) 114

01076 33425 14160 24751 06443 02505 20021 28075

17424/15816/13394 kHz, 23-05, 0900/0910/0920 UTC

Block No 0: Total Message Size 15 blocks: This transmission contains one message.

Block No 1: Link ID 45057: 7th of month: Msg Number 177: Msg Type 07145: Group Count (?) 91

18908 62726 43331 05507 49814 33881 17569 44259

19137/16352/14611 kHz, 23-05, 1100/1110/1120 UTC

Block No 0: Total Message Size 10 blocks: This transmission contains one message.

Block No 1: Link ID 36882: 22nd of month: Msg Number 040: Msg Type 07145: Group Count (?) 54

04452 15440 09395 06382 43092 02909 55641 37344

18749/16172/14561 kHz, 23-05, 2100/2110/2120 UTC

Block No 0: Total Message Size 4 blocks: This transmission contains one message.

 $Block\ No\ 1\ : Link\ ID\ 32821\ : 23rd\ of\ month\ : Msg\ Number\ 002: Msg\ Type\ 07145: Group\ Count\ (?)\ 4$

 $63124\ 00000\ 00000\ 03652\ 16767\ 34974\ 00893\ 55692$

17481/15826/13418 kHz, 24-05, 0800/0810/0820 UTC

Block No 0: Total Message Size 19 blocks: This transmission contains one message.

Block No 1: Link ID 45115: 7th of month: Msg Number 020: Msg Type 07145: Group Count (?) 114

01076 33425 14160 24751 06443 02505 20021 28075

17424/15816/13394 kHz, 24-05, 0900/0910/0920 UTC

Block No 0: Total Message Size 15 blocks: This transmission contains one message.

Block No 1: Link ID 45057: 7th of month: Msg Number 177: Msg Type 07145: Group Count (?) 91

18908 62726 43331 05507 49814 33881 17569 44259

19137 kHz, 24-05, 1100 UTC

Block No 0: Total Message Size 10 blocks: This transmission contains one message.

Block No 1: Link ID 36882: 22nd of month: Msg Number 040: Msg Type 07145: Group Count (?) 54

04452 15440 09395 06382 43092 02909 55641 37344

17433/15838/13426 kHz, 24-05, 1530/1540/1550 UTC

Block No 0: Total Message Size 4 blocks: This transmission contains one message.

Block No 1: Link ID 20501: 24th of month: Msg Number 127: Msg Type 07145: Group Count (?) 4

51760 00000 00000 03722 21447 36676 00893 17600

11161/9269/7530 kHz, 25-05. 0700/0710/0720 UTC

Block No 0 : Total Message Size 35 blocks : This transmission contains one message.

Block No 1: Link ID 45137: 22nd of month: Msg Number 022: Msg Type 07145: Group Count (?) 225

07060 64279 62437 08667 09959 33895 56175 55091

10521/8127 kHz, 25-05, 1200/1210 UTC

Block No 0: Total Message Size 1 blocks: This transmission contains 0 messages.

Block No 1: Link ID 45137: 22nd of month: Msg Number 022: Msg Type 07145: Group Count (?) 225 07060 64279 62437 08667 09959 33895 56175 55091

7530 kHz, 26-05, 0720 UTC

Block No 0: Total Message Size 60 blocks: This transmission contains 2 messages.

Block No 1: Link ID 45136: 25th of month: Msg Number 025: Msg Type 07145: Group Count (?) 182

17972 37832 08641 28186 34702 00600 36622 28954

10521/6945 kHz, 26-05, 1200/1220 UTC. Not decoded, incorrect shift (should be 1000)

19607/17459/15821 kHz, 26-05, 1400/1410/1420 UTC

Block No 0: Total Message Size 4 blocks: This transmission contains one message.

Block No 1: Link ID 32799: 26th of month: Msg Number 002: Msg Type 07145: Group Count (?) 4

50541 00000 00000 00080 09187 36001 00893 18598

17434/15787/13374 kHz, 26-05, 1650/1700/1710 UTC

Block No 0: Total Message Size 4 blocks: This transmission contains one message.

Block No 1: Link ID 20501: 26th of month: Msg Number 002: Msg Type 07145: Group Count (?) 4

39181 00000 00000 00252 12857 35808 00893 10912

11427 kHz, **26-05**, **2050** UTC. Test started with an incorrect shift (500Hz) then switched to 1000Hz **11427/9254/7689** kHz, **26-05**, **2100/2110/2120** UTC

Block No 0: Total Message Size 4 blocks: This transmission contains one message.

Block No 1: Link ID 45057: 26th of month: Msg Number 002: Msg Type 07145: Group Count (?) 4

55565 00000 00000 02618 38644 36099 00893 59683

11161/9269/7530 kHz, 27-05, 0700/0710/0720 UTC

Block No 0: Total Message Size 31 blocks: This transmission contains one message.

Block No 1: Link ID 45137: 26th of month: Msg Number 030: Msg Type 07145: Group Count (?) 203

25277 09671 06681 15273 01146 03886 53297 12471

15991/13579/11492 kHz, 27-05, 0800/0810/0820 UTC

Block No 0: Total Message Size 4 blocks: This transmission contains one message.

Block No 1: Link ID 45075: 27th of month: Msg Number 002: Msg Type 07145: Group Count (?) 4

64561 00000 00000 02234 21935 34719 01023 65435

15863 kHz, 27-05, 0925 UTC

Block No 0: Total Message Size 4 blocks: This transmission contains one message.

Block No 1: Link ID 20492: 27th of month: Msg Number 002: Msg Type 07145: Group Count (?) 4

 $30357\ 00000\ 00000\ 01354\ 34753\ 33761\ 00893\ 51087$

11161/9269/7530 kHz, 28-05, 0700/0710/0720 UTC

 $Block\ No\ 0: Total\ Message\ Size\ 60\ blocks: This\ transmission\ contains\ 2\ messages.$

Block No 1: Link ID 45136: 27th of month: Msg Number 032: Msg Type 07145: Group Count (?) 37

55733 29909 19363 01831 65099 39149 49187 59021

10521/8127/6845 kHz, 28-05, 1200/1210/1220 UTC

Block No 0: Total Message Size 60 blocks: This transmission contains 2 messages.

Block No 1: Link ID 45136: 27th of month: Msg Number 032: Msg Type 07145: Group Count (?) 37

55733 29909 19363 01831 65099 39149 49187 59021

15812/13409/11144 kHz, 28-05, 1330/1340/1350 UTC

Block No 0: Total Message Size 4 blocks: This transmission contains one message.

Block No 1 : Link ID 49237 : 28th of month : Msg Number 162 : Msg Type 07145 : Group Count (?) 4

06441 00000 00000 02521 44260 35474 00893 17376

16187/14406/12189 kHz, 28-05, 0600/0610/0620 UTC

Block No 0: Total Message Size 16 blocks: This transmission contains one message.

Block No 1: Link ID 40988: 26th of month: Msg Number 130: Msg Type 07145: Group Count (?) 99

23697 54677 34810 32122 10214 01978 42327 28378

11161/9269/7530 kHz, 29-05, 0700/0710/0720 UTC

Block No 0: Total Message Size 4 blocks: This transmission contains one message.

Block No 1: Link ID 45137: 29th of month: Msg Number 195: Msg Type 07145: Group Count (?) 4

36037 00000 00000 00554 01146 00096 00893 10043

19137/16352/14611 kHz, 30-05, 1100/1110/1120 UTC

Block No 0: Total Message Size 12 blocks: This transmission contains one message.

Block No 1: Link ID 36882: 29th of month: Msg Number 042: Msg Type 07145: Group Count (?) 68

47849 14960 11966 04856 31234 34330 53220 50258

16172/14561 kHz, 30-05, 2110/2120 UTC

Block No 0: Total Message Size 4 blocks: This transmission contains one message.

Block No 1: Link ID 32821: 30th of month: Msg Number 002: Msg Type 07145: Group Count (?) 4

34157 00000 00000 00426 13740 33250 00893 08092

19137/16352/14611 kHz, 31-05, 1100/1110/1120 UTC

Block No 0: Total Message Size 12 blocks: This transmission contains one message.

Block No 1: Link ID 36882: 29th of month: Msg Number 042: Msg Type 07145: Group Count (?) 68

47849 14960 11966 04856 31234 34330 53220 50258

17431/15826/13424 kHz, 31-05, 1530/1540/1550 UTC

Block No 0: Total Message Size 4 blocks: This transmission contains one message.

Block No 1: Link ID 20501: 31st of month: Msg Number 002: Msg Type 07161: Group Count (?) 4

63125 00000 00000 01620 16418 36502 00893 47063

X06 - Mazielka

12215 kHz, 15-05, 1020 UTC Mazielka. Sequence: 361245 18245 kHz, 16-05, 0944 UTC Mazielka. Sequence: 134265





13368 kHz, 06-05, 0640 UTC

813 813 813 1

04322 00109 61780 97986 46276 53553 64401 49462 46571 95840

09565 02863 20157 67408 68579 93959 65758 70222 30788 23004

90597 77759 67378 34013 85984 34658 50263 20926 66400 50601

82898 29773 24984 39355 29786 63322 99891 16420 77875 92087

38999 60952 02690 93349 01349 30425 85384 52171 93331 56967

42222 32072 23834 31510 85860 25270 71258 97678 79787 84449

84773 87019 05400 25373 19979 16160 04375 24578 30968 89653 02648 22703 81031 60888 08445 06466 45994 43195 05586 62607

90024 67425 17215 18061 46252 99304 23275 92899 49209 85293

12049 74634 68435 55473 85587 52908 04308 49381 28329 39814

80033 30644 97121 29257 14550 94335 24533 32893 15518 94438

70979 41503

10868/12168/13368 kHz, 09-05, 0600/0620/0640 UTC

813 813 813 1

04322 00109 61780 97986 46276 53553 64401 49462 46571 95840

09565 02863 20157 67408 68579 93959 65758 70222 30788 23004

90597 77759 67378 34013 85984 34658 50263 20926 66400 50601

82898 29773 24984 39355 29786 63322 99891 16420 77875 92087

38999 60952 02690 93349 01349 30425 85384 52171 93331 56967

42200 32072 23834 31510 85860 25270 71258 97678 79787 84449

84773 87019 05400 25373 19979 16160 04375 24578 30968 89653

02648 22703 81031 60888 08445 06466 45994 43195 05586 62607 90024 67425 17215 18061 46252 99304 23275 92899 49209 85293

12049 74634 68435 55473 85587 52908 04308 49381 28329 39814

80033 30644 97121 29257 14550 94335 24553 32893 15518 94438

70979 41503

10438/9938/9138 kHz, 12-05, 1730/1750/1820 UTC

491 491 491 000

02367 00001 00000 10140

10868/12168/13368 kHz, 13-05, 0600/0620/0640 UTC

813 813 813 000

08829 00001 00000 10140

9138 kHz. 14-05, 1810 UTC

491 491 491 1

00370 00155 83782 42046 73537 46614 78974 28599 16293 67329 40816 81025 95431 94713 56663 43811 89285 87757 45330 39462 47861 49284 50468 20545 94655 89525 88738 08014 40817 56187 94442 05796 15877 12960 92034 75329 31950 26830 40857 72803 89933 35100 97377 96660 98235 98797 78252 89571 93976 27683 77705 29787 97157 87543 65112 12852 33626 65004 85099 21463 80481 13739 08829 76953 14122 05358 63751 44689 49898 59958 80591 63374 22019 13552 58489 16991 97941 93424 82060 77503 48481 25129 40475 07423 54695 07014 48477 98582 75973 49326 18413 41389 26081 12917 31391 00884 35023 58435 22000 39763 62610 28600 22385 95950 27542 00989 46346 10296 59744 15181 87929 21360 64800 92677 08993 15621 21067 16185 78991 01210 05873 55294 53641 02222 06217 36253 01568 80664 00232 87074 95426 19655 74035 54092 30593 91152 53878 79919 33526 56120 86316 87686 39819 90159 67806 31949 89304 05174 53903 21310 60962 78953 33304 04889 96381 15681 97725 50621

10868/12168/13368 kHz, 16-04, 0600/0620/0640 UTC

813 813 813 000

06339 00001 00000 10140

10868/12168/13368 kHz, 20-04, 0600/0620/0640 UTC

813 813 813 000

07804 00001 00000 10140

10438/9938/9138 kHz, 21-05, 1730/1760/1810 UTC

491 491 491 000

09357 00001 00000 10140

10868/12168/13368 kHz, 23-04, 0600/0620/0640 UTC

813 813 813 000

08697 00001 00000 10140

10868/12168/13368 kHz, 27-05/30-05, 0600/0620/0640 UTC

813 813 813 1

01158 00133 06696 30087 86425 05428 10289 46394 74224 34122 95151 47906 70335 87188 24962 88264 21905 14415 24354 11411 44980 61093 65561 60107 84648 20973 85745 27401 65841 17542 76555 59940 58104 70281 33576 97387 73867 11151 81960 42334 24280 81840 92039 67361 85612 60401 85599 16960 30830 26807 10114 01960 33904 14701 87157 62836 83440 39140 44451 81895 93078 83406 67724 25815 40317 03492 24187 56958 04114 14959 99112 03557 41923 64887 66163 79294 55686 25648 89926 72540 71266 91077 81215 92790 75944 33039 41953 96651 38661 87752 11794 92185 79265 62455 33259 10015 61633 80136 12108 94763 25241 01185 99013 42560 41076 14665 65947 10637 53746 27906 54291 34235 18346 89098 65901 07838 72821 95501 25743 83716 95726 39461 27890 44237 68626 18429 13735 87056 81609 14035 47225 24310 59337 54314 30317 06371

10438/9938/9138 kHz, 28-05, 1730/1750/1810 UTC

491 491 491 1



XPA2

We already knew that Russia is back in Cuba and several transmissions from Cuba have been noted. Mike Chace also copied XPA2. He writes: "I've also recorded several XPA2s emanating from due South of me, which I can only imagine is Cuba. I've also heard all the other Russian Diplo & Intel systems from that direction: Serdolik, 200bd/500 Baudot, OFDM HDR modems and 200bd/1000 ACF=288. Many of these transmissions have been on channels used by CMU967, which was a Russian Naval station on Cuba active from the 70s to the early 2000s.

I started noticing the Cuba transmissions because they were at a time/frequency combination that wouldn't make sense for Moscow. Here are some examples (UTC):

14352kHz at 2300 14670kHz at 2250 16023kHz at 2310 18379kHz at 2330 20823kHz at 2300

I forgot to mention that a number of 50bd/500 synchronous FSK with ACF=64 aka the K4MT/NT9P Net have also been coming from Cuba. This is the system that happens to print "BZL26" during the preamble if you have Baudot selected."

17462/16114/14828 kHz, 01-05, 1900/1920/1940 UTC 05984 00001 00000 10140

17462/16114 kHz, **02-05**, **1900/1920** UTC 01729 00001 00000 10140

15314/15815/14514 kHz, **03-05, 1500/1520/1540** UTC 04771 00001 00000 10140

14538/13538/12138 kHz, **03-05, 2000/2020/2040** UTC 06548 00001 00000 10140

16314 kHz, 08-05/10-05, 1500 UTC

06918 00091 13082 27088 55768 06124 56549 03963 32620 14546 08683 98605 19274 89721 61955 95475 03211 66509 56814 52445 52562 00553 08835 74488 37369 10682 90630 86190 80756 39422 57347 32749 01303 89861 12309 24843 60155 49387 48632 31901 16316 18619 56085 91837 29734 01612 40543 69201 01168 03931 77721 30877 70228 78790 40040 46201 95419 79993 30531 07323 46725 98729 14458 87363 56935 75030 16176 15249 43021 61561 67508 55160 30496 03236 02952 10936 52099 37661 37126 92352 14043 14605

15814 kHz, 08-05, 1520 UTC

06918 00091 13082 27088 55768 06124 56549 03963 32620 14546 08683 98605 19274 89721 61955 23388 37369 10682 90630 86190 80756 39422 57347 32749 01303 89861 12309 24842 31115 41833 92254 55756 18280 85147 60742 30614 53623 50909 17441 53330 40155 49387 48632 31901 16316 18619 56085 91837 29734 01612 40543 69201 01168 03931 77721 30877 70228 78790 40040 46201 95419 79993 30531 07323 46725 98729 14458 87363 56935 75030 16176 15249 43021 61561 67508 55160 30496 02236 02952 10936 52099 36661 37126 82351 14043 14605

17462/16114/14828 kHz, 08-05, 1900/1920/1940 UTC

06491 00157 51095 25426 33452 42716 75595 81306 43252 06963 93952 43727 95317 13949 14472 92998 13834 57762 72859 81821 01321 37307 30668 97339 16421 33989 52925 73977 82656 33173 33213 81262 21225 96969 12176 85660 35029 12700 52725 42471 73852 29996 03877 18108 73228 03952 47382 83895 97648 41568 49181 69834 98394 98875 77300 35934 24804 11072 09939 67704 36281 17971 48068 41053 25850 79770 85857 23860 96269 09761 28639 13978 34368 06879 29512 46929 50376 55938 07389 13317 78866 58555 00668 11888 13322 31704 13099 49368 77720 33880 12275 05151 20823 44174 67728 07824 75512 46299 33053 10146 23675 18522 24680 33489 65229 60005 00326 48492 79654 39683 70956 40354 08055 84897 64163 66696 51487 91573 71064 53980 78215 96752 28234 79157 21663 24749 32606 76528 72158 06404 20815 51585 38323 80644 44233 30369 24047 81663 22362 72462 27870 26905 00522 39857 83101 73578 03251 16049 50991 93114 72299 79358 17662 52042 76892 54857 29753 67067 57234 56321

14538/13538/12138 kHz, 10-05, 2000/2020/2040 UTC

09071 00001 00000 10140

(2040 UTC: Transmitter test tones a couple of minutes before the supposed start but no transmission followed)

14538/13538/12138 kHz, 12-05, 2000/2020/2040 UTC

04884 00001 00000 10140

17462/14828 kHz, 15-05, 1900/1940 UTC

05572 00001 00000 10140

14538/12138 kHz, 17-05, 2000/2040 UTC

00752 00065 93389 52286 85178 98031 99851 37158 01710 58821 53061 29884 39016 37805 83869 21389 81125 81837 49513 78602 71037 24420 28347 54274 15905 90378 09736 90695 59238 17617 70881 98369 25539 66148 38877 29094 58828 23839 48422 22366 50121 78554 63255 32093 27574 45778 34568 91761 62331 35376 17468 51558 28882 09212 11860 34798 86812 02367 26823 96127 26962 54872 43927 81971 24781 22957 52246 30574

16314/15814/14514 kHz, 17-05, 1500/1520/1550 UTC

02947 00173 91888 85088 60982 47380 90619 61562 04755 20487 16441 85615 56853 25583 10429 71780 29063 30568 68228 65450 87805 84450 43188 65370 59877 94052 56777 75253 75634 20403 63277 68252 34261 33284 58750 38537 18987 84088 60387 63922 27816 69303 98303 64045 29509 94992 38649 85149 96202 85800 66952 15897 63774 47028 91011 13261 10791 92669 67092 44371 34348 57157 48851 76949 26796 45376 95848 28718 71732 05613 39441 47028 55055 62339 68290 66330 18167 15999 27014 50165 23007 59550 44908 26328 91990 87602 39580 02875 07254 20374 13626 46866 25647 57300 93743 54016 29201 23539 38515 56242 77720 80893 14629 84260 86686 80117 65414 06320 93529 51180 18282 36465 35588 09006 07981 00261 32846 98161 24054 51107 40093 01054 92366 19327 48783 27467 43132 16934 95695 78554 90657 50396 22408 79920 92091 49089 47863 28318 62969 65142 01428 45492 45371 30764 59666 43635 92015 92617 50476 60031 61669 48603 47323 41868 91199 48149 39069 79547 40695 64053 41845 87541 61234 81526 74437 25668 59579 74146 93834 12640 82540 77912 61708 59200 78064 61772

18767/17467 kHz, 22-05, 0720/0740 UTC

00862 00139 37995 85423 83756 75692 28234 50362 65146 37027 62389 11367 81503 10795 59005 64353 84038 35168 03088 07925 16697 53830 30486 03444 04225 88258 28778 66138 50666 66836 02001 42404 04118 36136 65123 72299 11828 36662 39858 06348 03888 83283 85581 91084 00967 98925 73817 45268 05130 40854 56956 73635 82616 50266 86640 77906 53776 35432 33528 33432 14657 46414 45488 96707 00376 99649 29570 56692 86626 75142 85234 43349 33219 16231 27177 88882 02530 57732 48685 11854 97746 55539 69749 82239 67360 09204 70089 72253 99857 37954 77511 71713 44055 60465 55530 61510 77888 12923 44597 37555 44702 63995 23777 61696 44222 42444 66993 57149 60424 42852 20036 79493 31224 00900 37844 56888 58354 69752 31491 35043 86601 00438 96915 40803 97508 29728 47508 60896 94941 05907 44009 03634 50132 28273 39235 47445 03436 88968 12170 10337 21071 35641

17462/16114/14828 kHz, 22-05/23-05, 1900/1920/1940 UTC

09257 00113 44899 48642 18948 08149 85866 61317 55582 67134 58992 86807 18518 57165 11420 68728 86558 24382 96847 78015 19224 40022 30466 73450 35445 82452 18002 29302 56346 39052 83978 47887 98696 09441 74621 48054 57186 00048 35713 34742 21906 11278 56849 53627 00870 23896 39916 45666 59907 51388 11966 46254 11036 20581 81028 74096 26482 31934 70195 71480 56759 71288 61507 63208 54614 61592 92275 48535 87862 72136 55969 91339 05284 05124 19574 43885 07786 85003 81244 51240 58235 11559 15337 87431 16427 13407 33882 58031 70507 24578 62143 38288 27505 48401 09093 12626 48700 40521 06978 87331 87369 40348 10426 88433 10670 08660 17759 40701 33804 65078 98173 71681 71202 53854 45655 57733

16314/14514 kHz, 24-05, 1500/1540 UTC

07319 00001 00000 10140

14538/13538/12138 kHz, 24-05, 2000/2020/2040 UTC

04378 00073 66682 57337 59224 04451 53975 37219 01421 16146 05527 30667 30196 77874 09494 31589 41227 54239 00462 26922 83852 71350 47333 39277 08234 35453 62835 99356 02500 80004 48342 90346 61649 20390 17987 07805 07868 55002 60299 60592 44397 63944 62216 54104 74308 13101 52420 60404 51306 48077 91936 79139 67297 59263 87664 38626 81694 68479 03466 17399 88013 59445 03906 35096 89087 02692 35069 88266 01685 58441 41628 18219 67146 70250 55570 21112

17467 kHz, 26-05, 0740 UTC

00324 00105 22181 28052 92077 05575 35202 98085 72259 61908 38852 55505 73965 78852 88059 77333 60316 56710 96044 30063 03340 90980 66649 21887 23537 69680 28807 27758 95381 74448 06154 90678 64843 93292 40007 04399 28420 22435 35292 24874 63239 19393 70475 98364 68796 59569 24056 99828 27194 15956 90547 94781 53739 35066 40879 69045 51605 11909 73038 50463 30134 46912 22275 24328 51483 02319 88876 07824 30217 01133 68947 56862 18704 59928 91809 25932 43885 74050 72167 93524 96485 17987 93696 06197 71036 80885 30347 97223 89520 71252 63999 02912 60250 53325 32009 70555 88304 41396 99975 94471 61530 81720 64138 38426 36115 89776 38561 64772

19667/18767/17467 kHz, 28-05, 0700/0720/0740 UTC

00323 00105 23181 28052 92077 05575 35202 98085 72259 61908 38852 56615 73965 79852 89059 78343 60316 57810 96044 30163 03340 90980 67749 21887 23537 69680 28817 27758 95381 74558 06154 90678 64843 93292 40007 04399 28420 22435 35292 24874 63239 19393 70475 98364 68796 59569 24056 99828 27194 15956 90547 94781 53739 35066 40879 69045 51605 11909 73038 50463 30134 46912 22275 24328 51483 02319 88876 07824 30217 01133 68947 56862 18704 59928 91809 25932 43885 74050 72167 93524 96485 17987 93696 06197 71036 80885 30347 97223 89520 71252 63999 02912 60250 53325 32009 70555 88304 41396 99975 94471 61530 81720 64138 38426 36115 89776 38561 64772

16314/15814/14514 kHz, 29-05/31-05, 1500/1520/1540 UTC

05875 00119 58003 87387 58623 28096 89320 36659 62873 16990 32920 81656 54509 78478 43216 89611 20702 31451 25690 74624 09317 58405 46864 19334 57639 43008 28366 41285 15862 93625 88680 83242 66807 05948 73108 25915 36989 98742 06217 93335 67507 00349 07075 00653 38916 62341 79697 04623 07137 98342 88391 10566 65467 30902 29183 28528 08953 33840 14871 52150 75841 79339 94921 40717 57513 34496 82820 00077 90700 44922 97279 17962 45350 88969 18319 83307 42925 33447 56016 54768 46552 44176 08284 43383 81819 77786 55067 52479 95749 27592 49268 05219 09690 06922 42927 57654 71648 84087 49524 24260 47957 96438 19285 60239 16069 01928 10934 66062 38380 68209 36863 04215 45756 01594 23980 19915 02160 28113 80676 30822 72078 56532

17462/16114/14828 kHz, **29-05, 1900/1910/1920** UTC 05493 00001 00000 10140

17462/16114/14828 kHz, **30-05, 1900/1910/1920** UTC 05392 00001 00000 10140

14538/13538/12138 kHz, 31-05, 2000/2020/2040 UTC 04491 00001 00000 10140



Polish Intelligence

14575 kHz, 01-05, 0655/0700 UTC

7727 kHz, 07-05, 1305/1310 UTC

13537 kHz, 08-05, 0530/0535 UTC

14575 kHz, 08-05, 0655/0700 UTC

8423 kHz, 08-05, 0900/0905 UTC

0554 0554 0554 0554 0554

88888 88888 74863 97273 77630 03075 25948 62528 87041 25906

06732 85570 56802 71637 69622 52816 02891 38334 44359 79441

76406 76906 10749 59438 24600 36879 67634 28008 88032 85065

30159 25234 52389 84075 94622 24554 21186 75431 98454 88888

88888

00041 00041

12067 kHz, 08-05, 1005/1010 UTC

6480 kHz, 11-05, 0800/0805 UTC

0434 0434 0434 0434 0434

88888 88888 28914 59105 49804 76719 99070 25983 17564 58223

98352 65515 25635 82930 54977 74119 52162 20324 97378 34165

15668 92762 54469 54996 14527 00649 93624 72748 92638 34178

19986 75793 88888 88888

00034 00034

13424 kHz, 11-05, 0845/0850 UTC

7837 kHz, 11-05, 1305/1310 UTC

0547 0547 0547 0547 0547

88888 88888 60598 81989 68883 75429 04173 22165 35042 03776

46067 69878 90063 51605 48670 51905 16880 80732 69509 37775

 $57581\ 55045\ 02511\ 80018\ 02058\ 80123\ 74080\ 12139\ 71758\ 46192$

42543 46563 33050 73813 51106 68665 81216 66765 11742 88888

88888

00041 00041

13470 kHz, 12-05, 0630/0635 UTC

0574 0574 0574 0574 0574

88888 88888 28713 87884 83956 47036 03880 98309 54796 39383

10710 70435 81223 12028 82657 83923 93099 89169 70043 97963

10576 85402 48986 34247 72991 73071 05985 29260 18169 17517

59976 73714 99837 61724 88888 88888

00036 00036

13537 kHz, 13-05, 0530/0535 UTC

13424 kHz, 13-05, 0845/0850 UTC

7837 kHz, 13-05, 1305/1310 UTC

0547 0547 0547 0547 0547

88888 88888 60598 81989 68883 75429 04173 22165 35042 03776

46067 69878 90063 51605 48670 51905 16880 80732 69509 37775

57781 55045 02511 80018 02058 80123 74080 12139 71758 46192

42543 46563 33050 73813 51106 68665 81216 66765 11742 88888

88888

00041 00041

13470 kHz, 14-05, 0630/0635 UTC

0574 0574 0574 0574 0574

88888 88888 28713 87884 83956 47036 03880 98309 54796 39383

10710 70435 81223 12028 82657 83923 93099 89169 70043 97963

10576 85402 48986 34247 72991 73071 05985 29260 18169 17517

59976 73714 99837 61724 88888 88888

00036 00036

16388 kHz, 14-05, 1000/1005 UTC

16005 kHz, 14-05, 1140 UTC

 $0217\ 0217\ 0217\ 0217\ 0217\ 00000\ 00000\ 00000\ 00000\ 00000\ 00000\ 00000\ 00000\ 00000\ 00000$

8423 kHz, 15-05, 0900/0905 UTC

14575 kHz, 15-05, 0655/0700 UTC

12067 kHz, 15-05, 1005/1010 UTC

0675 0675 0675 0675 0675

88888 88888 73090 56443 50245 88660 65025 13068 33750 83615

08815 80729 91699 19453 22165 43654 50835 06956 33444 88818

14560 89231 42574 45739 77796 41617 01639 35414 72681 49455

20868 75842 35240 03906 24829 88442 72403 56243 48947 14453

88888 88888

00042 00042

7727 kHz, 17-05, 1305/1310 UTC

13046 kHz, 18-05, 0815/0820 UTC

 $0446\ 0446\ 0446\ 0446\ 0446\ 00000\ 00000\ 00000\ 00000\ 00000\ 00000\ 00000\ 00000\ 00000$

13424 kHz, 18-05, 0850/0855 UTC

16388 kHz, 18-05, 1000/1005 UTC

14575 kHz, 19-05, 0655/0700 UTC

 $0684\ 0684\ 0684\ 0684\ 00000\ 00000\ 00000\ 00000\ 00000\ 00000\ 00000\ 00000\ 00000\ 00000$

14940 kHz, 19-05, 0730 UTC

13424 kHz, 20-05, 0845/0850 UTC

9576 kHz, 20-05, 1030/1035 UTC

0325 0325 0325 0325 0325

88888 88888 89086 41982 83329 56839 16302 92266 50679 18119

53618 49117 35664 34841 89704 68142 82910 66136 01638 02629

26142 12947 99992 03303 14067 29624 14274 73672 84443 04894

77695 38991 98911 82660 80385 87323 55124 42935 88888 88888

00040 00040

7837 kHz, 20-05, 1305/1310 UTC

13470 kHz, 21-05, 0630/0635 UTC

14940 kHz, 21-05, 0730/0735 UTC

 $0433\ 0433\ 0433\ 0433\ 00000\ 00000\ 00000\ 00000\ 00000\ 00000\ 00000\ 00000\ 00000\ 00000$

6480 kHz, 21-05, 0800/0805 UTC

16388 kHz, 21-05, 1000/1005 UTC

7727 kHz, 22-05, 1305/1310 UTC

0437 0437 0437 0437 0437

88888 88888 94181 36974 45579 21958 73302 55493 77417 70448

88549 64516 40895 92829 78648 95886 89101 99166 68676 55095

60039 93345 93015 31575 09256 79782 24386 60945 79541 44963

48310 42830 75563 69370 59651 41786 03120 56558 50536 69013

88888 88888

00042 00042

13537 kHz, 22-05, 0530/0535 UTC

13046 kHz, 22-05, 0815/0820 UTC

 $0446\ 0446\ 0446\ 0446\ 0446\ 00000\ 00000\ 00000\ 00000\ 00000\ 00000\ 00000\ 00000\ 00000\ 00000$

8423 kHz, 22-05, 0900/0905 UTC

12067 kHz, 22-05, 1005/1010 UTC

 $0675\ 0675\ 0675\ 0675\ 0675\ 00000\ 00000\ 00000\ 00000\ 00000\ 00000\ 00000\ 00000\ 00000\ 00000\ 00000$

7727 kHz, 24-05, 1305/1310 UTC

0437 0437 0437 0437 0437

88888 88888 94181 36974 45579 21958 73302 55493 77417 70448

88549 64516 40895 92829 78648 95886 89101 99166 68676 55095

60039 93345 93015 31575 09256 79782 24386 60945 79541 44963

48310 42830 75563 69370 59651 41786 03120 56558 50536 69013

88888 88888

00042 00042

14972 kHz, 24-05, 1405/1410 UTC

6480 kHz, 25-05, 0800/0805 UTC

13424 kHz, 25-05, 0845/0850 UTC

0353 0353 0353 0351 0353

88888 88888 46620 37562 50386 02546 33815 68195 54751 32571

15023 61009 67649 93789 26751 49992 93792 77382 18824 72704

31575 71582 69524 29505 94777 53033 87640 33220 32262 25386

41409 66601 56023 24123 88888 88888

00036 00036

7837 kHz, 25-05, 1305/1310 UTC

13470 kHz, 26-05, 0630/0635 UTC

14575 kHz, 26-05/2805, 0655/0700 UTC

0684 0684 0684 0684 0684 0684

88888 88888 51105 05382 35713 33746 07575 58267 99508 20642

64777 43764 18292 54336 09300 76842 18466 71284 56398 41740

03463 50700 65974 55854 32415 58014 10838 91252 88074 88649

91005 20235 75558 30432 55247 60893 89858 63434 88888 88888

00040 00040

14940 kHz, 26-05/28-05, 0730/0735 UTC

0433 0433 0433 0433 0433

88888 88888 45264 66426 03403 29003 65149 81070 79997 20198

89937 12048 50022 71456 69023 22669 49434 52040 06966 01699

05866 94347 14272 16831 66883 08796 79011 33930 03887 59402

20720 09681 25954 86400 88888 88888

00036 00036

8423 kHz, 26-05, 0900/0905 UTC

12067 kHz, 26-05, 1005/1010 UTC

9576 kHz, 26-05, 1030/1035 UTC

13537 kHz, 27-05/28-05, 0530/0535 UTC

0453 0453 0453 0453 0453

88888 88888 81889 34271 67033 52262 29390 66201 33467 08906

72393 99118 32712 15821 11861 31593 69606 56457 08197 17986

73827 44533 55250 14409 40830 76305 80779 92883 62443 63587

97779 22448 75932 37980 27748 82126 88888 88888

00038 00038

13424 kHz, 27-05, 0845/0850 UTC

0353 0353 0353 0353 0353

88888 88888 46620 37562 50386 02546 33815 68195 54751 32571

15023 61009 67649 93789 26751 49992 93792 77382 18824 72704

31575 71582 69524 29505 94777 53033 87640 33220 32262 25386

41409 66601 56023 24123 88888 88888

00036 00036

9576 kHz, 27-05, 1030/1035 UTC

7837 kHz, 27-05, 1305/1310 UTC

13470 kHz, 28-05, 0630/0635 UTC

16388 kHz, 28-05, 1000/1005 UTC

14575 kHz, 28-05, 0655/0700 UTC

0684 0684 0684 0684 0684 0684

88888 88888 51105 05382 35713 33746 07575 58267 99508 20642

64777 43764 18292 54336 09300 76842 18466 71284 56398 41740

03463 50700 65974 55854 32415 58014 10838 91252 88074 88649

91005 20235 75558 30432 55247 60893 89858 63434 88888 88888

00040 00040

13046 kHz, 28-05, 0815/0820 UTC

 $0446\ 0446\ 0446\ 0446\ 0446\ 00000\ 00000\ 00000\ 00000\ 00000\ 00000\ 00000\ 00000\ 00000$

8423 kHz, 28-05, 0900/0905 UTC

12067 kHz, 28-05, 1005/1010 UTC

7727 kHz, 31-05, 1305/1310 UTC

14972 kHz, 31-05, 1405/1410 UTC



North Korean diplomatic stations

16855 kHz, 24-05, 0642 UTC, DPRK-ARQ 600/600 LSB



Egyptian diplomatic stations

Modes: SITOR-A 100/170 & Codan-9001

19522 kHz, 13-05, 0700 UTC, SITOR-A 100/170. Message in SITOR-B 100/170

MFA Cairo clg OOVQ Egyptian embassy Beijing.

RUSSIAN MILITARY TRANSCRIPTS

Excerpts from logs provided by JPL, Tom, Wolfgang, Nige



M32 Russian / CIS Military CW Stations

3299 kHz, 04-05, 2056 UTC

WTX6 DE XZIU K
CM3U DE XZIU K
CM3U K
R K
L1BP DE XZIU K
L1BP K
R K

I2IW DE XZIU K I2IW K

I2IW R K 5213 kHz, 18-05, 2345 UTC, i.p.

MVKP QSA 3 K OK K R K M16S DE IEC7 QSA L K DE M16S QSA 2 QSA M16S QSA 3 K

OK K R K J6JK DE IEC7 QSA ? K IEC7 DE J6JK QSA 3 QSA ? K

J6JK QSA 3 K OK K R K

NSYB DE IEC7 QSA? K
BAHV DE IEC7 QSA? K
CA7K DE IEC7 QSA? K
2RS6 DE IEC7 QSA? K
M6Q2 DE IEC7 QSA? K
B94R DE IEC7 QSA? K
NSYB DE IEC7 QSA? K
ZPFV DE IEC7 QSA? K
PUVS DE IEC7 QSA? K
W9WY DE IEC7 QSA? K
NSYB DE IEC7 QSA? K

B94R B94R B94R DE IEC7 IEC7 QSA ? K

NSYB DE IEC7 QSA? K

7931 kHz, 14-05

1009 UTC: LIT9 DE YA8B QTC K

1010 UTC: YA8B 506 18 14 1302 506 = 306 = MMMMM 5lg msg 1017 UTC: XXX XXX WEGI WEGI 56940 BOLAQIJ 8725 8486 1028 UTC: XXX XXX WEGI WEGI 28315 POMORAN 2362 0592 1502 UTC: LIT9 DE YA8B K RK

5SCK DE YA8B K RK F5KM DE YA8B K RK BVFW DE YA8B K RK WD9D DE YA8B K RK KTPQ DE YA8B K RK XTNB DE YA8B K RK

1514 UTC: XXX XXX WEGI WEGI 82859 ELEMENAT 5099 7987 1551 UTC: YA8B 131 20 14 1846 131 = 377 = followed by 5lg msg

1600 UTC: LIT9 DE KPBI ZOO ZVV ZOF QYT6 K

1634 UTC: XXX XXX WEGI WEGI 74264 BALEEC 0279 7695

KALEDINEC 8497 7928





M32c Russian Air Force Voyenno-vozdushnye sily Rossii

Tu-95MS Bear H net

8029 kHz, 04-05, 0625 UTC W-markers

8029 kHz, 04-05, 0643 UTC D2WD DE TRL5 QSA 4 K. R K

8029 kHz, 05-05, 0740 UTC W-markers

8895 kHz, 14-05, 0640 UTC W-markers and G-markers

8895 kHz, 09-05, 0900 UTC W-markers 8895 kHz, 14-05, 0700 UTC Ü-markers

9128 kHz, 14-05, 1033 UTC TV6P DE QYYI QTC K. QYYI = 188 215 466 337 830 408 K. P7YR DE QYYI K

8895 kHz, 15-05, 0800 UTC W-markers



EMERGENCY ACTION MESSAGES & SKYKING MESSAGES

Frequencies: 8992

02-05, 1723 UTC McClellan 30 chr EAM MWX7FK XW34Q6VUQN7D6AWDB22VAPW2
02-05, 1749 UTC McClellan 30 chr EAM MW4WKV G57QU5AAMK6VXONJCVHOAV3X

LOGS SECTION

Freq.	Code	Date	UTC	Day	Remarks	Mode	Ctrb
16855	DPRK	24-5	0642	Sun	North Korean diplo	DPRK-ARQ 600/600 LSB	(Nico)
5948	E06	7-5	2030	Thu	724 613 20 14259	USB	(HFD)
14565	E06	8-5	0500	Fri	460 975 123 36891	USB	(HFD)
16125	E06	8-5	0600	Fri	460	USB	(HFD)
5731	E06	8-5	2130	Fri	315 613 20 14259	USB	(HFD)
14565	E06	21-5	0500	Thu	460 975 123 36981 66032 20555 84900 88673 92931 975 123 00000	USB	(AB)
16125	E06	21-5	0600	Thu	460 975 123 36981 66032 20555 84900 88673 92931 975 123 00000	USB	(AB)
14565	E06	22-5	0500	Fri	460 975 123 36981 66032 20555 84900 88673 92931 975 123 00000	USB	(AB)
16125	E06	22-5	0600	Fri	460 975 123 36981 66032 20555 84900 88673 92931 975 123 00000	USB	(AB)
5731	E06	22-5	2130	Fri	315 921 20 14259 22676 32782 73311 98089 12250 921 20 00000	USB	(AB)
14763	E07	3-5	1700	Sun	731 1 252 131 57660	AM	(HFD)
14763	E07	3-5	1700	Sun	731 1 252 131 57660 66174 31103 51898 83051 85737 000 000	AM	(AB/MPJ)
13363	E07	3-5	1720	Sun	731 1	AM	(HFD)
13363	E07	3-5	1720	Sun	731 1 252 131 57660 66174 31103 51898 83051 85737 000 000	AM	(AB/MPJ)
12163	E07	3-5	1740	Sun	731 1	AM	(HFD)
L2163	E07	3-5	1740	Sun	731 1 252 131 57660 66174 31103 51898 83051 85737 000 000	AM	(AB/MPJ)
9064	E07	4-5	0600	Mon	024 024 024 000	USB	(AB)
10265	E07	4-5	0620	Mon	024 024 024 000	USB	(AB)
4812	E07	4-5	1900	Mon	845 0	AM	(HFD)
4812	E07	4-5	1900	Mon	845 845 845 000	AM	(MPJ)
13412	E07	4-5	1920	Mon	845 845 845 000	AM	(MPJ)
13412	E07	4-5	1920	Mon	845 0	AM	(HFD)
13363	E07	6-5	1720	Wed	731 731 731 000	AM	(AB)
11539	E07	7-5	2010	Thu	553 0	AM	(HFD)
L0547	E07	7-5	2030	Thu	553 0	AM	(HFD)
9064	E07	9-5	0600	Sat	024 024 024 000	USB	(AB)
10264	E07	9-5	0620	Sat	024 024 024 000	USB	(AB)
13363	E07	10-5	1720	Sun	731 731 731 000	AM	(MPJ)
9065	E07	11-5	0600	Mon	024 024 024 000	USB	(AB)
10264	E07	11-5	0620	Mon	024 024 024 000	USB	(AB)
L4812	E07	11-5	1900	Mon	845 1 9901 114 17445 41111 51305 20293 58099 29013 000 000	AM	(AB/MPJ)
1512	E07		1940	Mon	845 1 9901 114 17445 41111 51305 20293 58099 29013 000 000	AM	(AB/MPJ)
14763	E07	13-5	1700	Wed	731 1 252 131 57660 66174 31103 51898 83051 85737 000 000	AM	(AB)
13363	E07	13-5	1720	Wed	731 1 252 131 57660 66174 31103 51898 83051 85737 000 000	AM	(AB)
12163	E07	13-5	1740	Wed	731 1 252 131 57660 66174 31103 51898 83051 85737 000 000	AM	(AB)
L0547	E07	14-5	2030	Thu	553 553 553 000	AM	(AB)
9064	E07		0600	Sat	024 024 024 000	USB	(AB)
10264	E07		0620	Sat	024 024 024 000	USB	(AB)
L2177	E07		0800	Sat	148 1 6785 3753 63 02916 71524 67150 44321 53333 81897 000 000	USB	(AB)
L4763	E07		1700	Sun	731 1 252 131 57660 66174 31103 51898 83051 85737 000 000	AM	(AB)
13363	E07		1720	Sun	731 1 252 131 57660 66174 31103 51898 83051 85737 000 000	AM	(AB)
12163	E07		1740	Sun	731 1 252 131 57660 66174 31103 51898 83051 85737 000 000	AM	(AB)
9064	E07		0600	Mon		USB	(AB)
10264	E07		0620	Mon		USB	(AB)
L4812	E07		1900	Mon		AM	(MPJ)
14763	E07		1700		731 731 731 000	AM	(AB)

	0	D. I. 1170	n -	D	50 - d -	0.1
Freq.	Code	Date UTC	Day	Remarks	Mode	Ctrb
13363	E07	20-5 1720	Wed	731 731 731 000	AM	(AB)
14763	E07	24-5 1700	Sun	731 731 731 000	AM	(AB)
13363	E07	24-5 1720	Sun	731 731 731 000	AM	(AB)
10264	E07	25-5 0620	Mon	024 024 024 000	AM	(AB)
14812	E07	25-5 1900	Mon	845 845 845 000	AM	(AB)
13412	E07	25-5 1920	Mon	845 845 845 000	AM	(AB)
14763	E07	27-5 1700	Wed	731 731 731 000	AM	(AB/MPJ)
13363	E07	27-5 1720	Wed	731 731 731 000	AM	(AB/MPJ)
14812	E07	27-5 1900	Wed	845 845 845 000	AM	(MPJ)
13412	E07	27-5 1920	Wed	845 845 845 000	AM	(MPJ)
11539	E07	28-5 2010	Thu	553 553 553 000	AM	(AB)
10547	E07	28-5 2030	Thu	553 553 553 000	AM	(AB)
9064	E07	30-5 0600	Sat	024 024 024 000	USB	(AB)
10264	E07	30-5 0620	Sat	024 024 024 000	USB	(AB)
14763	E07	31-5 1700	Sun	731 731 731 000	AM	(AB)
13363	E07	31-5 1720	Sun	731 731 731 000	AM	(AB)
12182	E07a	1-5 1510	Fri	101 101 101 000	USB	(MPJ/HFD)
11082	E07a	1-5 1510	Fri	101 101 101 000	USB	(MPJ/HFD)
12177	E07a	2-5 0800		148 0	USB	(HFD)
			Sat			
13477	E07a	2-5 0820	Sat	148 0	USB	(HFD)
12182	E07a	8-5 1510	Fri	101 101 101 000	USB	(AB/GHn)
11082	E07a	8-5 1530	Fri	101 101 101 000	USB	(MPJ)
10766	E07a	13-5 2020	Wed	172 1 67279 1848 57 47281 80025 12640 32821 66015 67445 000 000	USB	(AB)
9266	E07a	13-5 2040	Wed	172 1 67279 1848 57 47281 80025 12640 32821 66015 67445 000 000	USB	(AB)
12182	E07a	15-5 1510	Fri	171 1 67875 3753 63 02916 71524 67150 4321 53333 81897 000 000	USB	(AB)
11082	E07a	15-5 1530	Fri	171 1 67875 3753 63 02916 71524 67150 4321 53333 81897 000 000	USB	(AB)
10182	E07a	15-5 1550	Fri	171 1 67875 3753 63 02916 71524 67150 4321 53333 81897 000 000	USB	(AB)
7933	E07a	21-5 0430	Thu	912 0	USB	(HFD)
9133	E07a	21-5 0450	Thu	912 0	USB	(HFD)
11082	E07a	22-5 1530	Fri	101 101 101 000	USB	(GHn)
9064	E07a	23-5 0600	Sat	024 024 024 000	USB	(AB)
10264	E07a	23-5 0620	Sat	024 024 024 000	USB	(AB)
12177	E07a	23-5 0800	Sat	148 148 148 000	USB	(AB)
13477	E07a	23-5 0820	Sat	148 148 148 000	USB	(AB)
12166	E07a	27-5 2000	Wed	172 1 68076 8198 69 01802 71771 13207 06838 65382	USB	(MPJ)
12182	E07a	29-5 1510	Fri	101 101 101 000	USB	(AB/MPJ)
11082	E07a	29-5 1530	Fri	101 101 101 000	USB	(AB/MPJ)
12177	E07a	30-5 0800	Sat	148 148 148 000	USB	(AB)
13477	E07a	30-5 0820	Sat	148 148 148 000	USB	(AB)
13424	E11	1-5 0545	Fri	348/00	USB	(AB/HFD)
14753		1-5 0343		633/00	USB	
	E11		Fri	·		(AB/HFD)
12924	E11	1-5 0830	Fri	649/00	USB	(HFD)
8530	E11	1-5 2000	Fri	576/00	USB	(AB/MPJ/HFD)
14865	E11	2-5 1705	Sat	392/00	USB	(HFD)
16335	E11	3-5 1540	Sun	228/00	USB	(AB)
16335	E11	3-5 1540	Sun	228/00	USB	(HFD)
10800	E11	4-5 0450	Mon	416/00	USB	(HFD)
9610	E11	4-5 0745	Mon	262/00	USB	(AB)
16335	E11	4-5 1540	Mon	228/00	USB	(HFD)
13424	E11	5-5 0645	Tue	517/00	USB	(HFD)
15632	E11	5-5 0745	Tue	335/00	USB	(HFD)
9610	E11	5-5 1045	Tue	469/00	USB	(HFD)
13873	E11	5-5 1045	Tue	576/00	USB	(HFD)
13427	E11	6-5 0900	Wed	534/00	USB	(HFD)
9610	E11	6-5 1045	Wed	469/00	USB	(HFD)
10356	E11	7-5 1530	Thu	262/00	USB	(MPJ)
8088	E11	7-5 1730	Thu	416/00	USB	(AB/MPJ/HFD)
13424	E11	8-5 0545	Fri	348/00	USB	(AB)
14743	E11	8-5 0710	Fri	633/00	USB	(AB)
8530	E11	8-5 2000	Fri	576/00	USB	(AB)
14865	E11	9-5 1705	Sat	392/00	USB	(AB)
9130	E11	9-5 2005	Sat	363/00	USB	(AB)

9130		Date UTC	Day	Remarks	Mode	Ctrb
	E11	10-5 2005	Sun	363/00	USB	(MPJ)
	E11	11-5 0745	Mon	262/00	USB	(AB)
	E11	11-5 0745	Mon	262/00	USB	(HFD)
	E11	11-5 0830	Mon	649/00	USB	(AB)
	E11	11-5 0900	Mon	534/00	USB	(AB)
16388	E11	11-5 1110	Mon	952/40 Attention 44499 02781 07702 50324 93700 70959 Attention, rpt msg, out	USB	(AB)
	E11	13-5 0805	Wed	311/00	USB	(AB)
13427	E11	13-5 0900	Wed	534/00	USB	(AB)
	E11	13-5 1625	Wed	978/00	USB	(HFD)
	E11	13-5 1705	Wed	392/00	USB	(AB)
	E11	14-5 0745	Thu	335/00	USB	(AB)
9150	E11	14-5 0820	Thu	436/30 Attention 28915 59105 49804 34178 29986 75793 Attention, rpt msg, out	USB	(AB)
10213	E11	14-5 0930	Thu	270/00	USB	(AB)
8088	E11	14-5 1730	Thu	416/00	USB	(GHn)
13424	E11	15-5 0545	Fri	348/00	USB	(AB)
	E11	15-5 0830	Fri	649/00	USB	(AB)
	E11	15-5 2000	Fri	576/00	USB	(MPJ)
14865	E11	16-5 1705	Sat	392/00	USB	(AB)
	E11	17-5 0805	Sun	311/00	USB	(HFD)
	E11	17-5 0805	Sun	311/00	USB	(AB)
	E11	17-5 2005	Sun	363/00	USB	(GHn/MPJ)
	E11	18-5 0820	Mon	438/00	USB	(AB)
	E11	18-5 0830	Mon	649/00	USB	(AB)
	E11	18-5 0900	Mon	534/00	USB	(AB)
10487	E11	18-5 1710	Mon	957/24 Attention 99182 43517 84425 15119 85143 78903 Attention, rpt msg, out	USB	(AB)
13424	E11	19-5 0645	Tue	517/00	USB	(AB)
14753	E11	19-5 0710	Tue	633/00	USB	(AB)
15803	E11	19-5 1300	Tue	133/00	USB	(AB)
13427	E11	20-5 0900	Wed	534/00	USB	(AB)
10213	E11	20-5 0930	Wed	270/00	USB	(AB)
15803	E11	20-5 1300	Wed	133/00	USB	(AB)
13424	E11	21-5 0645	Thu	517/00	USB	(AB)
15632	E11	21-5 0745	Thu	335/00	USB	(AB)
9150	E11	21-5 0820	Thu	438/00	USB	(AB)
	E11	21-5 1730	Thu	416/00	USB	(AB/MPJ)
	E11	22-5 0545	Fri	348/00	USB	(AB)
	E11	22-5 0710	Fri	633/00	USB	(AB)
	E11	24-5 2005	Sun	363/00	USB	(MPJ)
	E11	25-5 0745	Mon	262/00	USB	(AB)
	E11	25-5 0820	Mon	438/00	USB	(AB)
	E11	25-5 0830	Mon	649/00	USB	(AB)
	E11	26-5 0645	Tue	517/00	USB	(AB)
	E11	26-5 1045	Tue	576/00	USB	(AB)
	E11	26-5 1045	Tue	469/00	USB	(AB)
	E11	26-5 1300	Tue	133/00	USB	(AB)
	E11	27-5 1045	Wed	469/00	USB	(AB)
	E11	27-5 1300	Wed	133/00	USB	(AB)
	E11	28-5 0645	Thu	517/00	USB	(AB)
	E11	28-5 0820	Thu	438/00	USB	(AB)
	E11	28-5 0830	Thu	649/00	USB	(AB)
	E11	28-5 0930	Thu	270/00	USB	(AB)
	E11	28-5 1110	Thu	952/31 Attention 11873 46999 36582 77811 54172 12585 Attention, rpt msg, out	USB	(AB)
8088	E11	28-5 1730	Thu	416/38 Attention 75729 54083 59480 42290 45260 87704 Attention, rpt msg, out	USB	(AB)
13537	E11	29-5 1225	Fri	521/00	USB	(MPJ)
8530	E11	29-5 2000	Fri	576/00	USB	(MPJ)
	E11	30-5 1705	Sat	392/00	USB	(AB)
14865						

Freq.							
•	Code	Date		Day	Remarks	Mode	Ctrb
16388	E11a	1-5	1110	Fri	952/32 Attention 42669 76775 79080 89053 95608 31135 14208 46356 90830 91768	USB	(MPJ)
.6388	E11a	1-5	1110	Fri	956/08 18125	USB	(HFD)
L0487	E11a	1-5	1710	Fri	959/22 Attention 23757 79029 64117 54099 87440 30562 77260 14782 86826 04336	USB	(MPJ/HFD)
13722	E11a	2-5	1405	Sat	ip	USB	(HFD)
14518	E11a	2-5	1810	Sat	982/10 Attention 90033 46550 95139 51575 74446 45921 74969 98924 81132 78278 Attention, rpt msg, out	USB	(AB)
4518	E11a	2-5	1810	Sat	982/10 90033	USB	(HFD)
9130	E11a	2-5	2005	Sat	369/34 61340	USB	(HFD)
9130	E11a	3-5	2005	Sun	369/34 61340	USB	(HFD)
9130	E11a	3-5	2005	Sun	369/34 Attention 61340 72492 45717 62428 40936 55811 Attention, rpt msg, out	USB	(AB/MPJ)
12924	E11a	4-5	0830	Mon	640/33 Attention 84141 43664 24808 82726 02954 67272 Attention, rpt msg, out	USB	(AB)
16388	E11a	4-5	1110	Mon	952/31 Attention 93510 01187 Attention, rpt msg, out (barely audible)	USB	(AB)
14518	E11a	5-5	1810	Tue	987/10 Attention 00051 22858 83366 52052 20455 46575 25300 25835 92641 52136 Attention, rpt msg, out	USB	(AB)
10213	E11a	6-5	0930	Wed		USB	(HFD)
16335	E11a	6-5		Wed	712/31 99000	USB	(HFD)
.6335	E11a	7-5	1155	Thu	712/31 99000	USB	(HFD)
16388	E11a	8-5	1110	Fri	952/35 Attention 53561 56608 02011 76671 85005 59036 Attention, rpt msg, out	USB	(AB)
10487	E11a	8-5	1710	Fri	957/30 Attention 45914 93510 01187 64805 99854 60341 Attention, rpt msg, out (sent 31 groups)	USB	(AB/MPJ)
13722	E11a	9-5	1400	Sat	981/10 Attention 31418 04021 31698 81602 93693 83705 78749 42634 76132 88306 Attention, rpt msg, out	USB	(AB)
14518	E11a	9-5	1810	Sat	982/10 Attention 72776 25997 89625 40437 22571 46279 76605 14917 56571 26556 Attention, rpt msg, out	USB	(AB)
9150	E11a	11-5	0820	Mon	436/30 = 28914	USB	(HFD)
12924	E11a	11-5	0825	Mon	i.p. 92638 34178 19986 75793 Attention 28914 59105 49804 76719 9 stopped at 0827z (this is the message sent by POL-FSK at 0800z)	USB	(AB)
L0487	E11a	11-5	1710	Mon	953/30 Attention 62276 75579 77491 18760 88714 38589 Attention, rpt msg, out	USB	(AB/MPJ)
13424	E11a	12-5	0645	Tue	512/32 Attention 28713 87884 83956 73714 99837 61724 Attention, rpt msg, out	USB	(AB)
14518	E11a	12-5	1810	Tue	985/10 Attention 17602 93724 40747 84673 41521 32997 98220 65770 54305 09905 Attention, rpt msg, out	USB	(AB)
15803	E11a	13-5	1300	Wed	135/37 Attention 91348 unreadable	USB	(AB)
13908	E11a	13-5	1300	Wed	135/37 91348	USB	(HFD)
13424	E11a	14-5	0645	Thu	512/32 Attention 28713 87884 83956 73714 99837 61724 Attention, rpt msg, out	USB	(AB)
L0487	E11a	15-5	1710	Fri	955/30 Attention 03876 34704 29750 07230 68898 51520 Attention, rpt msg, out	USB	(AB)
14769	E11a	16-5	0530	Sat	984/10 Attention 34282 82992 80816 04292 26132 51574 78399 61045 24897 57644 Attention, rpt msg, out	USB	(AB)
14518	E11a	16-5	1810	Sat	986/10 Attention 41510 08564 27604 88975 08677 06483 01662 96575 75868 19906 Attention, rpt msg, out	USB	(GHn)
L6335	E11a	17-5	1540	Sun	227/37 88334	USB	(HFD/AB)
L6388	E11a	18-5	1110	Mon	952/35 Attention 54051 00411 37223 60571 57054 19654 Attention, rpt msg, out	USB	(AB)
14769	E11a	19-5	0530	Tue	98#/##	USB	(HFD)
L3722	E11a	19-5	1400	Tue	983/10 Attention 63945 70704 23335 95545 12722 67277 69631 49190 28180 62719 Attention, rpt msg, out	USB	(AB/MPJ)
4518	E11a	19-5	1810	Tue	988/10 Attention 75902 03682 38788 51452 33790 81347 18687 31595 52759 93503 Attention, rpt msg, out	USB	(MPJ)
0610	E11a	20-5	1045	Wed	464/26 Attention 89086 41982 83329 87323 55124 42935 Attention, rpt msg, out	USB	(AB)
.0356	E11a	21-5	1530	Thu	266/35 07889	USB	(HFD)
L6388	E11a	22-5		Fri	952/31 Attention 11837	USB	(AB)
13427	E11a	25-5	0900	Mon	532/32 Attention 46620 37562 50386 41409 66601 56023 24123 Attention, rpt msg, out	USB	(AB)
	E11a	25-5	1710	Mon	959/30 Attention 94074 36267 73633 10025 61274 90939 Attention, rpt msg,	USB	(GHn)
10487	LIIa				out		

_						a
Freq.	Code	Date UTC	Day	Remarks	Mode	Ctrb
15632	E11a	26-5 0745	Tue	330/32 Attention 45264 66426 03403 09681 25954 86400 Attention, rpt msg, out	USB	(AB)
13424	E11a	27-5 0545	Wed	340/34 Attention 81889 34271 67033 37980 27748 82126 Attention, rpt msg, out	USB	(AB)
14975	E11a	27-5 0805	Wed	311/35 Attention 35335 05797 29308 83898 42488 87679 Attention, rpt msg, out	USB	(AB)
13427	E11a	27-5 0900	Wed	532/32 Attention 46620 37562 50386 66601 56023 24123 Attention, rpt msg, out	USB	(AB)
13424	E11a	28-5 0545	Thu	340/34 Attention 81889 34271 67033 37980 27748 82126 Attention, rpt msg, out	USB	(AB)
14753	E11a	28-5 0710	Thu	636//36 Attention 51105 05382 35713 60893 89858 63434 Attention, rpt msg, out	USB	(AB)
15632	E11a	28-5 0745	Thu	330/32 Attention 45264 66426 03403 09681 25954 86400 Attention, rpt msg, out	USB	(AB)
10487	E11a	29-5 1710	Fri	953/21 Attention 38500 21319 06237 86070 98178 05012 Attention, rpt msg,	USB	(AB/MPJ)
13722	E11a	30-5 1400	Sat	out 983/10 Attention 88355 32691 69540 91021 34099 12542 22510 34281 26113 23360 Attention, rpt msg, out	USB	(AB/GHn)
16780	E17z	14-5 0800	Thu	674 821 5 52401 63919 92699 14600 74248 821 5 00000	USB	(AB)
12850	E17z	14-5 0800	Thu	674 821 5 52401 63919 92699 14600 74248 821 5 00000	USB	(AB)
	E17z	21-5 0800	Thu		USB	
16780				674 283 5 38352 94289 15244 21541 56567 283 5 00000		(AB)
16780	E17Z	21-5 0800	Thu	674 383 5 38353	USB	(HFD)
12850	E17z	21-5 0810	Thu	674 283 5 38352 94289 15244 21541 56567 283 5 00000	USB	(AB)
12850	E17z	21-5 0810	Thu	674	USB	(HFD)
16780	E17z	28-5 0800	Thu	674 283 5 38352 94289 15244 21541 56567 283 5 00000	USB	(AB)
12850	E17z	28-5 0810	Thu	674 283 5 38352 94289 15244 21541 56567 283 5 00000	USB	(AB)
19522	EGY	13-5 0700	Wed	MFA Cairo clg OOVQ Egyptian embassy Beijing. Msg in SITOR-B	SITOR-A 100/170	(AAI)
5246	G06	11-5 1700	Mon	248 248 248 00000	AM	(MPJ/HFD)
6887	G06	14-5 1830	Thu	842 832 20 37839 35787 98273 60491 75924 04594 832 20 00000	USB	(AB/MPJ)
5943	G06	15-5 1930	Fri	218 832 20 37839 35787 98273 60491 75924 04594 832 20 00000	USB	(MPJ)
5943	G06	15-5 1930	Fri	218 832 20 37839	USB	(HFD)
7320	G06	18-5 0800	Mon	329 0	USB	(HFD)
6887	G06	28-5 1830	Thu	842 832 20 = 92839	USB	(HFD)
6887	G06	28-5 1830	Thu	842 832 20 37839 35787 98273 60491 75924 04594 832 20 00000	USB	(AB/GHn)
5943	G06	29-5 1930	Fri	218 832 20 37839 35787 98273 60491 75924 04594 832 20 00000	USB	(AB/MPJ/GHn)
5855	HM01	1-5 0500	Fri	48637 10685 62001 73017 54404 72102	AM/RDFT	(AB)
10345	HM01	1-5 0600	Fri	48637 10685 62001 73017 54404 72102	AM/RDFT	(AB)
	HM01	1-5 0000	Fri	48637 10685 62001 73017 54404 72102. Should be on 9330 MHz. Stops and re-	AM/RDFT	(AB)
				starts at 0707z. Switch to 9330 MHz at 0713z		
9330	HM01	1-5 0713	Fri	48637 10685 62001 73017 54404 72102. Late switch from 10345 kHz	AM/RDFT	(AB)
11435	HM01	1-5 1643	Fri	48638 10686 62002 73018 54405 72103	AM/RDFT	(DSch)
11530	HM01	1-5 1659	Fri	48638 10686 62002 73018 54405 72103	AM/RDFT	(DSch)
11635	HM01	1-5 1828	Fri	48638 10686 62002 73018 54405 72103	AM/RDFT	(DSch)
11635	HM01	1-5 2102	Fri	48638 10686 62002 73018 54405 72103	AM/RDFT	(DSch)
10715	HM01	1-5 2158	Fri	48638 10686 62002 73018 54405 72103	AM/RDFT	(DSch)
8135	HM01	1-5 2308	Fri	Cuban cut nbrs	CW	(DSch)
11462	HM01	2-5 0535	Sat	48638 10686 62002 73018 54405 72103	AM/RDFT	(AB)
11462	HM01	2-5 0600	Sat	48638 10686 62002 73018 54405 72103. Should be on 9330 MHz. Stopped at 0602z. No show on 9330 MHz.	AM/RDFT	(AB)
11435	HM01	2-5 1628	Sat	48639 0687 62003 63351 54406 72104	AM/RDFT	(DSch)
11530	HM01	2-5 1658	Sat	48639 0687 62003 63351 54406 72104	AM/RDFT	(DSch)
11635	HM01	2-5 1806	Sat	48639 0687 62003 63351 54406 72104	AM/RDFT	(DSch)
16180	HM01	2-5 1000	Sat	48639 10687 62003 63351 54406 72104 48639 10687 62003 63351 54406 72104	AM/RDFT	(DSch)
16180	HM01	2-5 2059	Sat	48639 10687 62003 63351 54406 72104. Should be on 17480 kHz	AM/RDFT	(DSch)
17480		2-5 2159	Sat	48639 10687 62003 63351 54406 72104. Silould be on 17480 kHz	AM/RDFT	
	HM01				· ·	(DSch)
5855	HM01	3-5 0500	Sun	48639 10687 62003 63351 54406 72104	AM/RDFT	(AB)
10345	HM01	3-5 0600	Sun	48639 10687 62003 63351 54406 72104	AM/RDFT	(AB)
10345	HM01	3-5 0630	Sun	48639 10687 62003 63351 54406 72104	AM/RDFT	(Dan)
9330	HM01	3-5 0700	Sun	48639 10687 62003 63351 54406 72104	AM/RDFT	(AB)
9065	HM01	3-5 0800	Sun	48639 10687 62003 63351 54406 72104	AM/RDFT	(AB)
9240	HM01	3-5 0900	Sun	48639 10687 62003 63351 54406 72104	AM/RDFT	(AB)
11435	HM01	3-5 1601	Sun	05741 57701 62004 63351 54407 72105	AM/RDFT	(DSch)
11530	HM01	3-5 1658	Sun	05741 57701 62004 63351 54407 72105	AM/RDFT	(DSch)
11635	HM01	3-5 1804	Sun	05741 57701 62004 63351 54407 72105	AM/RDFT	(DSch)

Freq.	Code	Date UTC	Day	Remarks	Mode	Ctrb
11635	HM01	3-5 2059	-	05741 57701 62004 63351 54407 72105	AM/RDFT	(DSch)
10715	HM01	3-5 2159		05741 57701 62004 63351 54407 72105	AM/RDFT	(DSch)
5855	HM01	4-5 0502		05741 57701 62004 63351 54407 72105	AM/RDFT	(AB)
10345	HM01	4-5 0600		05741 57701 62004 63351 54407 72105	AM/RDFT	(AB)
9330	HM01	4-5 0700		05741 57701 62004 63351 54407 72105	AM/RDFT	(AB)
9065	HM01	4-5 0800		05741 57701 62004 63351 54407 72105	AM/RDFT	(AB)
11530	HM01	4-5 1659		05741 57701 62005 63352 54408 72106	AM/RDFT	(DSch)
11635	HM01	4-5 1832		05741 57701 62005 63352 54408 72106	AM/RDFT	(DSch)
11635	HM01	4-5 2107	Mon	05741 57701 62005 63352 54408 72106	AM/RDFT	(DSch)
10715	HM01	4-5 2212		05741 57701 62005 63352 54408 72106	AM/RDFT	(DSch)
10715	HM01	4-5 2230		05741 57701 62005 63352 54408 72106	AM/RDFT	(Dan)
11435	HM01	5-5 1629		05742 57702 62006 63353 03641 72107	AM/RDFT	(DSch)
11530	HM01	5-5 1659		05742 57702 62006 63353 03641 72107	AM/RDFT	(DSch)
11635	HM01	5-5 1806		05742 57702 62006 63353 03641 72107	AM/RDFT	(DSch)
16180	HM01	5-5 2058		05742 57702 62006 63353 03641 72107	AM/RDFT	(DSch)
16180	HM01	5-5 2130		05742 57702 62006 63353 03641 72107	AM/RDFT	(Dan)
17540	HM01	5-5 2204		05742 57702 62006 63353 03641 72107	AM/RDFT	(DSch)
11462	HM01	7-5 0515		05743 57703 62007 63354 03641 62421	AM/RDFT	(AB)
14375	HM01	7-5 0600		05743 57703 62007 63354 03641 62421	AM/RDFT	(AB)
11635	HM01	7-5 1558		05744 57704 62008 63355 03642 62421	AM/RDFT	(DSch)
16180	HM01	7-5 1558		05744 57704 62008 63355 03642 62421	AM/RDFT	(DSch)
11530	HM01	7-5 1558		05744 57704 62008 63355 03642 62421	AM/RDFT	(DSch)
11435	HM01	7-5 1558		05744 57704 62008 63355 03642 62421	AM/RDFT	(DSch)
17540	HM01	7-5 1558		05744 57704 62008 63355 03642 62421	AM/RDFT	(DSch)
17480	HM01	7-5 2200		05744 57704 62008 63355 03643 62421	AM/RDFT	(Dan)
9330	HM01	8-5 0700		05744 57704 62008 63355 03642 62421	AM/RDFT	(AB)
9065	HM01	8-5 0800		05744 57704 62008 63355 03642 62421	AM/RDFT	(AB)
9240	HM01	8-5 0900		05744 57704 62008 63355 03642 62421	AM/RDFT	(AB)
11435	HM01	8-5 1612		05745 57705 62009 63356 03643 62422	AM/RDFT	(DSch)
11530	HM01	8-5 1702		05745 57705 62009 63356 03643 62422	AM/RDFT	(DSch)
11635	HM01	8-5 1802		05745 57705 62009 63356 03643 62422	AM/RDFT	(DSch)
11635	HM01	8-5 2103		05745 57705 62009 63356 03643 62422	AM/RDFT	(DSch)
10715	HM01	8-5 2207		05745 57705 62009 63356 03643 62422	AM/RDFT	(DSch)
11435	HM01	9-5 1640		05746 57706 08621 63357 03644 62423	AM/RDFT	(DSch)
11530	HM01	9-5 1703		05746 57706 08621 63357 03644 62423	AM/RDFT	(DSch)
11635	HM01	9-5 1808		05746 57706 08621 63357 03644 62423	AM/RDFT	(DSch)
16180	HM01	9-5 2100		05746 57706 08621 63357 03644 62423	AM/RDFT	(AB/DSch)
17540	HM01	9-5 2158	Sat	05746 57706 08621 63357 03644 62423	AM/RDFT	(DSch)
5855	HM01	10-5 0510		i.p. 05746 57706 08621 63357 03644 62423	AM/RDFT	(AB)
5855	HM01	10-5 0600		05746 57706 08621 63357 03644 62423. Should be on 10345 kHz	AM/RDFT	(AB)
10345	HM01	10-5 0625		i.p. 05746 57706 08621 63357 03644 62423. Now on correct freq.	AM/RDFT	(AB)
9330	HM01	10-5 0713		i.p. 05746 57706 08621 63357 03644 62423	AM/RDFT	(AB)
9065	HM01	10-5 0808	Sun	i.p. 05746 57706 08621 63357 03644 62423	AM/RDFT	(AB)
11435	HM01	10-5 1645	Sun	05747 57707 08621 63358 03645 62424	AM/RDFT	(DSch)
11530	HM01	10-5 1658	Sun	05747 57707 08621 63358 03645 62424	AM/RDFT	(DSch)
11635	HM01	10-5 1758		05747 57707 08621 63358 03645 62424	AM/RDFT	(DSch)
11635	HM01	10-5 2101	Sun	05747 57707 08621 63358 03645 62424	AM/RDFT	(DSch)
10715	HM01	10-5 2200	Sun	05747 57707 08621 63358 03645 62424	AM/RDFT	(DSch)
10345	HM01	11-5 0600	Mon	05747 57707 08621 63358 03645 62424	AM/RDFT	(AB)
11435	HM01	11-5 1558	Mon	05748 57708 08622 84021 03646 62425	AM/RDFT	(DSch)
11530	HM01	11-5 1715	Mon	05748 57708 08622 84021 03646 62425	AM/RDFT	(DSch)
11635	HM01	11-5 1759	Mon	05748 57708 08622 84021 03646 62425	AM/RDFT	(DSch)
10715	HM01	11-5 2230	Mon	05748 11090 08622 84021 03646 62426	AM/RDFT	(Dan)
11435	HM01	12-5 1557		05748 11090 08622 84021 03646 62425 then off	AM/RDFT	(DSch)
11435	HM01	12-5 1558		05749 11091 08623 84021 03647 62426	AM/RDFT	(DSch)
11530	HM01	12-5 1700		05749 11091 08623 84021 03647 62426	AM/RDFT	(DSch)
11635	HM01	12-5 1803		05749 11091 08623 84021 03647 62426	AM/RDFT	(DSch)
11635	HM01	12-5 1858		05749 11091 08623 84021 03647 62426	AM/RDFT	(BW3)
16180	HM01	12-5 2113		05749 11091 08623 84021 03647 62426	AM/RDFT	(DSch)
17480	HM01	12-5 2200		05749 11091 08623 84021 03647 62426	AM/RDFT	(Dan)
17480	HM01	12-5 2200		05749 11091 08623 84021 03647 62426	AM/RDFT	(DSch/BW3)
8009	HM01	12-5 2204		HM01 and M08a at the same time. Should be M08a	AM/RDFT	(DSch)
					,	• •

_						
Freq.	Code	Date UTC	Day	Remarks	Mode	Ctrb
11435	HM01	13-5 1559	Wed	60641 11092 08624 84022 03648 62427	AM/RDFT	(DSch)
11530	HM01	13-5 1729	Wed	60641 11092 08624 84022 03648 62427	AM/RDFT	(DSch)
11635	HM01	13-5 1758	Wed	60641 11092 08624 84022 03648 62427	AM/RDFT	(DSch)
10715	HM01	13-5 2158	Wed	60641 11092 08624 84022 03648 62427	AM/RDFT	(DSch)
10715	HM01	13-5 2230	Wed	60641 11092 08624 84022 03648 62427	AM/RDFT	(Dan)
11635	HM01	14-5 1805	Thu	60641 11093 08625 84023 52031 62428	AM/RDFT	(DSch)
16180	HM01	14-5 2115	Thu	60641 11093 08625 84023 52031 62428	AM/RDFT	(DSch)
17480	HM01	14-5 2214	Thu	60641 11093 08625 84023 52031 62428	AM/RDFT	(DSch)
17480	HM01	14-5 2230	Thu	60641 11093 08625 84023 52031 62428	AM/RDFT	(Dan)
8135	HM01	14-5 2259	Thu	Yesterday groups: 60641 11092 08624 84022 03648 62427. Then M081, HM01	AM/RDFT	(DSch)
5855	HM01	15-5 0513	Fri	stops at 2301z 60641 11093 08625 84023 52031 62428	AM/RDFT	(AB)
10345	HM01	15-5 0559	Fri	60641 11093 08625 84023 52031 62428	AM/RDFT	(AB)
9330	HM01	15-5 0729	Fri	60641 11093 08625 84023 52031 62428	AM/RDFT	(AB)
11435	HM01	15-5 1604	Fri	60642 11094 08626 84024 52031 62429	AM/RDFT	(DSch)
11635	HM01	15-5 2059	Fri	60642 11094 08626 84024 52031 62429	AM/RDFT	(DSch)
10715	HM01	15-5 2200	Fri	60642 11094 08626 84024 52031 62429	AM/RDFT	(DSch)
14375	HM01	16-5 0600	Sat	60642 11094 08626 84024 52031 62429	AM/RDFT	(AB)
11435	HM01	16-5 1604	Sat	60643 11095 08627 84025 52032 71241	AM/RDFT	(DSch)
17480	HM01	16-5 2235	Sat	60643 11095 08627 84025 52032 71241	AM/RDFT	(BA2/Dan)
		17-5 1740	Sun			(DSch)
11530	HM01 HM01			60644 11096 08628 84026 52033 71241	AM/RDFT AM/RDFT	(DSch)
11435		18-5 1559	Mon	60645 11097 64371 84027 52034 71242	· · · · · · · · · · · · · · · · · · ·	, ,
11530	HM01	18-5 1735	Mon	60645 11097 64371 84027 52034 71242	AM/RDFT	(DSch)
11635	HM01	18-5 1804	Mon	60645 11097 64371 84027 52034 71242	AM/RDFT	(DSch)
11635	HM01	18-5 2057	Mon	60645 11097 64371 84027 52034 71242	AM/RDFT	(DSch)
10715	HM01	18-5 2157	Mon	60645 11097 64371 84027 52034 71242	AM/RDFT	(DSch)
11435	HM01	19-5 1641	Tue	60646 11098 64371 84028 52035 71243	AM/RDFT	(DSch)
11635	HM01	19-5 1759	Tue	60646 11098 64371 84028 52035 71243	AM/RDFT	(DSch)
11435	HM01	20-5 1628	Wed	60647 11099 64372 84029 52036 71244	AM/RDFT	(DSch)
10345	HM01	21-5 0600	Thu	60647 11099 64372 84029 52036 71244	AM/RDFT	(HFD)
16180	HM01	21-5 2107	Thu	60648 61771 64373 72351 52037 71245	AM/RDFT	(DSch)
11435	HM01	22-5 1640	Fri	73681 61771 64374 72351 52038 71246	AM/RDFT	(DSch)
9330	HM01	24-5 0700	Sun	73681 61772 64375 72352 25251 71247	AM/RDFT	(AB)
11435	HM01	24-5 1559	Sun	73682 61773 64376 72353 25251 57581	AM/RDFT	(DSch)
9065	HM01	25-5 0800	Mon	73682 61773 64376 72353 25251 57581	AM/RDFT	(AB)
9240	HM01	25-5 0900	Mon	73682 61773 64376 72353 25251 57581	AM/RDFT	(AB)
11435	HM01	25-5 1659	Mon	73684 61775 64378 72355 25253 57582	AM/RDFT	(DSch)
11530	HM01	25-5 1728	Mon	73684 61775 64378 72355 25253 57582	AM/RDFT	(DSch)
11635	HM01	25-5 1809	Mon	73684 61775 64378 72355 25253 57582	AM/RDFT	(DSch)
11635	HM01	25-5 2128	Mon	73684 61775 64378 72355 25253 57582	AM/RDFT	(DSch)
10715	HM01	25-5 2227	Mon	73684 61775 64378 72355 25253 57582	AM/RDFT	(DSch)
11462	HM01	26-5 0500	Tue	73684 61775 64378 72355 25253 57582	AM/RDFT	(AB)
11435	HM01	26-5 1559	Tue	73685 61776 32551 72356 25254 57583	AM/RDFT	(DSch)
11530	HM01	26-5 1707	Tue	73685 61776 32551 72356 25254 57583	AM/RDFT	(DSch)
11435	HM01	27-5 1602	Wed	73686 61777 32551 72357 25255 57584	AM/RDFT	(DSch)
11530	HM01	27-5 1734	Wed	73686 61777 32551 72357 25255 57584	AM/RDFT	(DSch)
11635	HM01	27-5 1816	Wed	73686 61777 32551 72357 25255 57584	AM/RDFT	(DSch)
11435	HM01	28-5 1559	Thu	73687 37161 32552 72358 25256 57585 at 281559	AM/RDFT	(DSch)
5855	HM01	29-5 0506	Fri	73687 37161 32552 72358 25256 57585 Late start. No callup, directly into RDFT	AM/RDFT	(AB)
11435	HM01	29-5 1559	Fri	73687 37161 32552 72358 25256 578585. Stops at 1555z. Then starts with 30581	AM/RDFT	(DSch)
11.00		25 5 2555		37161 32553 72359 25257 57586	,, .	(230)
11635	HM01	29-5 1758	Fri	30581 37161 32553 72359 25257 57586	AM/RDFT	(DSch)
11635	HM01	29-5 2102	Fri	30581 37161 32553 72359 25257 57586	AM/RDFT	(DSch)
10715	HM01	29-5 2158	Fri	30581 37161 32553 72359 25257 57586	AM/RDFT	(DSch)
8135	HM01	29-5 2302	Fri	30581 37161 32553 72359 25257 57586. Should be M08a	AM/RDFT	(DSch)
16180	HM01	30-5 2128	Sat	30581 37162 32554 09501 25258 57587	AM/RDFT	(AB/DSch)
11530	HM01	30-5 2159	Sat	30581 37162 32554 98501 25258 57587 30581 etc 301729	AM/RDFT	(DSch)
11435	HM01	30-5 2159	Sat	30581 37162 32554 98501 25258 57587 30581 37162 32554 98501 25258 57587	AM/RDFT	(DSch)
	-			at 301605	•	, ,
17480	HM01	30-5 2159	Sat	30581 37162 32554 98501 25258 57587	AM/RDFT	(DSch)
8009	HM01	30-5 2320	Sat	HM01 transmission on and off. Should be M08a	AM/RDFT	(DSch)
						· , ,

Freq.	Code	Date UTC	Day	Remarks	Mode	Ctrb
7351	HM02	8-5 0515	Fri	999 867 31 = 83117 64559 46942 64682 81809 23860 = 867 31 867 31 = repeat		(AB)
, 551	2	0 0 0010	• • • •	msg = 867 31 000 (I missed the callup)		(,)
7351	HM02	10-5 0540	Sun	999 329 29 = 02286 97569 76789 94225 36505 75820 = 329 29 0 0 0	FSK-CW/CW	(AB)
7351	HM02	11-5 0540	Mon	999 146 29 = 57836 55344 40358 97715 35535 96653 = 146 29 000	FSK-CW/CW	(AB)
7351	HM02	12-5 0540	Tue	999 497 28 = 35884 90810 54941 17515 67491 76125 = 497 28 000	FSK-CW/CW	(AB)
7351	HM02	13-5 0540	Wed	999 521 30 = 01118 99238 34749 ,,, 49032 51143 85498 = 521 30 000	FSK-CW/CW	(AB)
7351	HM02	14-5 0540	Thu	999 765 30 = 46103 77661 01170 61038 20350 33652 = 765 30 000	FSK-CW/CW	(AB)
6435	M01	2-5 1500	Sat	025 33330 = 52854	CW	(HFD)
5280	M01	5-5 1800	Tue	025 745 30 = 17503	CW	(HFD)
4905	M01	5-5 2000	Tue	025 745 30 = 17503	CW	(HFD)
5280	M01	14-5 1800	Thu	250 817 30 = = 27528 0276 (lost in noise)	CW	(MPJ)
4905	M01	19-5 2000	Tue	025 176 27 (no BTs) 75365 76697 96182 83462 86338	CW	(MPJ)
6780	M01	31-5 0700	Sun	025 918 30 = 96209	CW	(HFD)
5075	M01b	1-5 1902	Fri	336 159 38 = = 65727 36522 31847 59259 25310 //5465 kHz	MCW	(MPJ/HFD)
5465	M01b	1-5 1902	Fri	336 159 38 = = 65727 36522 31847 59259 25310 //5075 kHz	MCW	(MPJ/HFD)
4895	M01b	1-5 2010	Fri	467 159 38 = 65727 4895 //5340	CW	(HFD)
5340	M01b	1-5 2010	Fri	467 159 38 = 65727 4895 //4895	CW	(HFD)
5735	M01b	4-5 1810	Mon	364 159 38 = 65727 //5125	CW	(HFD)
5125	M01b	4-5 1810	Mon	364 159 38 = 65727 //5735	CW	(HFD)
5475	M01b	4-5 1915	Mon	858 159 38 = 65727 //5150	CW	(HFD)
5150	M01b	4-5 1915	Mon	858 159 38 = 65727 //5475	CW	(HFD)
5095	M01b	7-5 1832	Thu	815 159 38 = 65727 36522 31847 59259 25310 13387 32196 62002 12569	MCW	(MPJ/HFD)
5555	010	. 5 1052	1110	73149 = 159 38 000		(3/1.1. D)
5760	M01b	7-5 1832	Thu	815 159 38 = 65727 //5095	CW	(HFD)
5065	M01b	7-5 1942	Thu	936 159 38 = 65727 //5805	CW	(HFD)
5805	M01b	7-5 1942	Thu	936 159 38 = 65727 //5065	CW	(HFD)
5465	M01b	8-5 1902	Fri	336 159 38 = = 65727 36522 31847 59259 25310 13487 32196 62002 12569 73149 = = 159 38 000 //5075 kHz	MCW	(AB)
5075	M01b	8-5 1902	Fri	336 159 38 = = 65727 36522 31847 59259 25310 13487 32196 62002 12569 73149 = = 159 38 000 //5465 kHz	MCW	(AB)
5340	M01b	8-5 2010	Fri	467 159 159 38 38 = = etc	MCW	(AB)
5125	M01b	11-5 1810	Mon	364 159 38 = = 65727 36522 31847 59259 25310 13387 32196 62002 12 569 73149 = = 159 38 000 //5735 kHz	MCW	(MPJ)
5735	M01b	11-5 1810	Mon	364 159 38 = = 65727 36522 31847 59259 25310 13387 32196 62002 12569 73149 = = 159 38 000 //5125 kHz	MCW	(MPJ)
5475	M01b	11-5 1915	Mon	858 159 38 = = 65727 36522 31847 59259 25310 13387 32196 62002 12569 73149 = = 159 38 000//5150 kHz	MCW	(AB/MPJ)
5150	M01b	11-5 1915	Mon	858 159 38 = = 65727 36522 31847 59259 25310 13387 32196 62002 12569 73149 = = 159 38 000//5475 kHz	MCW	(AB/MPJ)
5805	M01b	14-5 1942	Thu	936 159 38 = = 65727 36522 31847 59259 25310 13387 32196 62002 12569 73149 = = 159 38 000	MCW	(MPJ)
5465	M01b	15-5 1902	Fri	336 159 38 = = 65727 36522 31847 59259 25310 13387 32196 62002 12569 73149 = = 159 38 000 //5075 kHz	MCW	(MPJ)
5075	M01b	15-5 1902	Fri	336 159 38 = = 65727 36522 31847 59259 25310 13387 32196 62002 12569 73149 = = 159 38 000 //5465 kHz	MCW	(MPJ)
5475	M01b	18-5 1915	Mon	· · · · · · · · · · · · · · · · · · ·	MCW	(MPJ)
5155	M01b	18-5 1915	Mon	858 159 38 = = 65727 36522 31847 59259 25310 13387 32196 62002 12569 73149 = = 159 38 000 //5475 kHz	MCW	(MPJ)
5095	M01b	21-5 1832	Thu	815 159 38 = = 65727 36522 31847 59259 25310 13387 32196 62002 12569 73149 = = 159 38 000 //5760 kHz	MCW	(MPJ)
5760	M01b	21-5 1832	Thu	815 159 38 = = 65727 36522 31847 59259 25310 13387 32196 62002 12569 73149 = = 159 38 000 //5095 kHz	MCW	(MPJ)
5805	M01b	21-5 1942	Thu	936 159 38 = = 65727 36522 31847 59259 25310 13387 32196 62002 12569 73149 = = 159 38 000 //5065 kHz	MCW	(MPJ)
5065	M01b	21-5 1942	Thu	936 159 38 = = 65727 36522 31847 59259 25310 13387 32196 62002 12569 73149 = = 159 38 000 //5805 kHz	MCW	(MPJ)
5805	M01b	28-5 1942	Thu	936 159 38 = 65727 36522 31847 59259 25310 = = 159 38 000 //5065 kHz	CW	(MPJ)
5065	M01b	28-5 1942	Thu	936 159 38 = 65727 36522 31847 59259 25310 = = 159 38 000 //5805 kHz	CW	(MPJ)
15632	M03	1-5 1420	Fri	874/37 = 79702 41588 42885 89493 36605 12384 45643 12037 41310 87693 = :		(MPJ)
				874/37 (repeats)		·
15632	M03	1-5 1420	Fri	874/37 = 79702	CW	(HFD)
7837	M03	3-5 1320	Sun	437/00	CW	(HFD)
7727	M03	4-5 1320	Mon	543/00	CW	(HFD)
7837	M03	7-5 1320	Thu	437/00 = 000 (VVV at 1313z)	CW	(AB/MPJ)

Freq.	Code	Date	UTC	Day	Remarks	Mode	Ctrb
7727	M03	13-5		Wed	540/37 = = 60598 81989 68883 81216 66765 11742 = 0 0 0	CW	(AB)
7727	M03	18-5		Mon	VVV 543/00 = = 000	CW	(AB)
7727	M03	20-5		Wed	VVV 543/00 = = 000	CW	(AB)
7837	M03	21-5		Thu	435/38 = = 94181 36974 45579 56558 50536 69013 = 435/38 = = repeat msg =	CW	(AB/WP3)
					000		(,,
7837	M03	24-5	1320	Sun	435/38 94181 36974 45579 56558 50536 69013 = = 000	CW	(AB)
7727	M03	25-5	1320	Mon	543/00 = = 000	CW	(AB)
7727	M03	27-5	1320	Wed	543/00 = = 000	CW	(AB/MPJ)
7837	M03	28-5	1320	Thu	437/00 = = 000	CW	(AB)
15632	M03	29-5	1420	Fri	879/00 = = 000	CW	(AB/MPJ)
7837	M03	31-5	1320	Sun	437/00 = = 000	CW	(AB)
15632	M03	31-5	1420	Sun	879/00 = = 000	CW	(AB/MPJ)
7554	M08a	1-5	2009	Fri	Cuban cut nbrs	CW	(DSch)
7554	M08a	2-5	1959	Sat	Cuban cut nbrs: AGNRN NNWTA DWTNN	CW	(DSch)
8009	M08a	2-5	2305	Sat	Cuban cut nbrs into text, no callup	CW	(DSch)
8135	M08a	3-5	2300	Sun	Tuning of the transmitter but no transmission	CW	(DSch)
8096	M08a	4-5	1359	Mon	Cuban cut nbrs	CW	(DSch)
7554	M08a	4-5	2003	Mon	Cuban cut nbrs	CW	(DSch)
8096	M08a	5-5		Tue	Cuban cut nbrs	CW	(DSch)
7554	M08a	5-5		Tue	Cuban cut nbrs	CW	(DSch)
8096	M08a	7-5		Thu	Cuban cut nbrs	CW	(DSch)
7554	M08a	7-5		Thu	Cuban cut nbrs	CW	(DSch)
8135	M08a	8-5		Fri	Cuban cut nbrs	CW	(DSch)
8009	M08a	11-5		Mon	Cuban cut nbrs: GRRTA (only 1 addressee)	CW	(DSCh/BW3)
7554	M08a	12-5		Tue	Cuban cut nbrs	CW	(DSch)
8009	M08a	12-5		Tue	M08a and HM01 at the same time. Should be M08a	CW	(DSch)
8096	M08a	13-5		Wed	Cuban cut nbrs	CW	(DSch)
8096	M08a	14-5		Thu	Cuban cut nbrs	CW	(DSch)
7554	M08a	14-5		Thu	Cuban cut nbrs: DGIAN UNNDA WWWRN	CW	(DSch)
8135	M08a	14-5		Thu	Cuban cut nbrs	CW	(DSch)
7554	M08a	16-5		Sat	Cuban cut nbrs	CW	(DSch)
8096	M08a	17-5		Sun	Cuban cut nbrs	CW	(DSch)
7555	M08a	17-5		Sun	DGI	CW	(JNC)
8096	M08a	19-5		Tue	Cuban cut nbrsL: GWITN TGANA ANWWR	CW	(DSch)
7554	M08a	22-5		Fri	Cuban cut nbrs	CW	(DSch)
7554	M08a	25-5		Mon	Cuban cut nbrs	CW	(DSch)
7554	M08a	26-5		Tue	Cuban cut nbrs: RIRAN IAAUA GUURA	CW	(DSch)
8096	M08a	27-5		Wed	Cuban cut nbrs: ARUNN GTURN TDIGA	CW	(DSch)
7554	M08a	27-5		Wed	Cuban cut nbrs	CW	(DSch)
8135	M08a	28-5		Thu	Cuban cut nbrs	CW	(DSch)
8096	M08a	29-5		Fri	Cuban cut nbrs	CW	(DSch)
7554	M08a	29-5		Fri	Cuban cut nbrs. No callup. Message only	CW	(DSch)
14869	M12	2-5		Sat	851 1	CW	(HFD)
13569	M12	2-5		Sat	851 1	CW	(HFD)
12169	M12	2-5		Sat	8511	CW	(HFD)
6857	M12	4-5 (Mon	850 0	CW	(HFD)
7557	M12	4-5 (Mon	850 0	CW	(HFD)
9241	M12	6-5		Wed	258 1	CW	(HFD)
7541	M12	6-5		Wed	258 1	CW	(HFD)
6841	M12	6-5		Wed	258 1	CW	(HFD)
13926	M12	7-5		Thu	919 919 919 000	CW	(MPJ)
12126	M12	7-5		Thu	919 919 919 000	CW	(MPJ)
10343	M12	12-5		Tue	124 1	CW	(HFD)
9264	M12	12-5		Tue	124 1	CW	(HFD)
8116	M12	12-5		Tue	124 1	CW	(HFD)
13386	M12	14-5		Thu	725 1	CW	(HFD)
13386	M12	14-5		Thu	725 1 7442 119 26221 59460 20359 99335 31596 29002 16170 31300 85606	CW	(MPJ)
1000	14177	± 4 ″J .	±,00	mu	15246 000 000	CVV	(1411.2)
12189	M12	14-5	1720	Thu	725 1 7442 119 26221 59460 20359 99335 31596 29002 16170 31300 85606	CW	(MPJ)
_33	·				15246 000 000	-	• -1
12189	M12	14-5	1720	Thu	725 1	CW	(HFD)
11491	M12	14-5		Thu	725 1	CW	(HFD)
			-	-			• •

Freq.	Code	Date UTC	Day	Remarks	Mode	Ctrb
11491	M12	14-5 1740) Thu	725 1 7442 119 26221 59460 20359 99335 31596 29002 16170 31300 85606	CW	(MPJ)
				15246 000 000		
9264	M12	14-5 1820) Thu	124 1 3160 145 22925 41885 76303 21442 70890 74274 59772 01460 01090	CW	(MPJ)
0446	1442	445 4046		11787 000	6)4/	(1.40.1)
8116	M12	14-5 1840) Thu	124 1 3160 145 22925 41885 76303 21442 70890 74274 59772 01460 01090 11787 000	CW	(MPJ)
10343	M12	14-5 1900) Thu	124 1 7351 108 88463 96646 24007 39782 15731 75229 52032 12865 37000	CW	(MPJ)
100.0		1.5 1500		03407 000 000	011	(5)
9264	M12	14-5 1920) Thu	124 1 7351 108 88463 96646 24007 39782 15731 75229 52032 12865 37000	CW	(MPJ)
				03407 000 000		, ,
8116	M12	14-5 1940) Thu	124 1 7351 108 88463 96646 24007 39782 15731 75229 52032 12865 37000	CW	(MPJ)
				03407 000 000		
11435	M12	18-5 1700) Mon	938 1	CW	(HFD)
11435	M12	18-5 1700) Mon	938 1 8314 101 96521 34917 78338 57549 83711 78411 37807 66858 91462	CW	(MPJ)
				85544 000 000		
10598	M12	18-5 1720) Mon	938 1	CW	(HFD)
10598	M12	18-5 1720) Mon	938 1 8314 101 96521 34917 78338 57549 83711 78411 37807 66858 91462	CW	(MPJ/AB)
		40 - 4-4		85544 000 000		(2.40.1)
9347	M12	18-5 1740) Mon	938 1 8314 101 96521 34917 78338 57549 83711 78411 37807 66858 91462 85544 000 000	CW	(MPJ)
9327	M12	18-5 1740) Mon		CW	(UED)
						(HFD)
8047	M12	18-5 1800) Mon	463 1 8921 140 67081 59520 50754 25774 19388 72964 37502 63536 40948 65116 000 000	CW	(MPJ)
6802	M12	18-5 1820) Mon	463 1 8921 140 67081 59520 50754 25774 19388 72964 37502 63536 40948	CW	(MPJ)
3002	14114	10 3 1020	. 141011	65116 000 000		(1411.4)
5788	M12	18-5 1840) Mon	463 1 8921 140 67081 59520 50754 25774 19388 72964 37502 63536 40948	CW	(MPJ)
				65116 000 000		, ,
9176	M12	18-5 1900	Mon	257 1 5406 113 90981 95029 26255 55267 32950 62677 02276 96491 62952	CW	(MPJ)
				17027 000 000		
7931	M12	18-5 1920	Mon	257 1 5406 113 90981 95029 26255 55267 32950 62677 02276 96491 62952	CW	(MPJ)
				17027 000 000		
6904	M12	18-5 1940) Mon	257 1 5406 113 90981 95029 26255 55267 32950 62677 02276 96491 62952	CW	(MPJ)
				17027 000 000		
10343	M12	19-5 1930) Tue	124 1 3404 64 16375 45823 07856 77220 84671 81095 40991 98159 81989	CW	(JNC/MPJ)
		10 = 10=		61648 000 000		(2.40.1)
9264	M12	19-5 1950) Tue	124 1 3404 64 16375 45823 07856 77220 84671 81095 40991 98159 81989 61648 000 000	CW	(MPJ)
9176	M12	20-5 1800) Wed	257 1	CW	(HFD)
7931	M12	20-5 1820		257 1	CW	(HFD)
6904	M12	20-5 1840			CW	(HFD)
8047	M12	20-5 1900		463 1	CW	(HFD)
6802	M12	20-5 1920		463 1	CW	(HFD)
11435	M12	20-5 1920		938 1	CW	(HFD)
5788	M12	20-5 1930		463 1	CW	(HFD)
10598		20-5 1940			CW	
	M12			938 1		(HFD)
9327	M12	20-5 2010		938 1	CW	(HFD)
9241	M12	20-5 2100		258.0	CW	(HFD)
7541	M12	20-5 2120		258 0	CW	(HFD)
7984	M12	21-5 0630		911 0	CW	(HFD)
9184	M12	21-5 0650		911 0	CW	(HFD)
13386	M12	21-5 1700) Thu	725 1 1266 100 47090 80161 05256 75839 88667 29488 80646 58846 47211 03590 000 000	CW	(MPJ)
12100	N/17	21 5 1720	Th		CW	(MDI)
12189	M12	21-5 1720) Thu	725 1 1266 100 47090 80161 05256 75839 88667 29488 80646 58846 47211 03590 000 000	CVV	(MPJ)
11491	M12	21-5 1740) Thu	725 1 1266 100 47090 80161 05256 75839 88667 29488 80646 58846 47211	CW	(MPJ)
,,,,				03590 000 000		\ <i>\</i> /
10343	M12	21-5 1800) Thu	124 1 2123 154 89199 98835 71452 55957 45703 35920 10744 61560 26959	CW	(MPJ)
	-			51028 000 000		,
10343	M12	21-5 1800) Thu	124 1	CW	(HFD)
9264	M12	21-5 1820		124 1	CW	(HFD)
9264	M12	21-5 1820		124 1 2123 154 89199 98835 71452 55957 45703 35920 10744 61560 26959	CW	(MPJ)
				51028 000 000		·
8116	M12	21-5 1840) Thu	124 1 2123 154 89199 98835 71452 55957 45703 35920 10744 61560 26959	CW	(MPJ)
				51028 000 000		
8116	M12	21-5 1840) Thu	124 1	CW	(HFD)
10343	M12	21-5 1900) Thu	124 1	CW	(HFD)

Eroa	Code	Date UTC	Day	Remarks	Mode	Ctrb
Freq. 10343	M12	21-5 1900	Day Thu	124 1 8323 103 77246 74402 81831 34854 02449 91024 02311 83522 18109	CW	(MPJ)
10545	IVIIZ	21-5 1900	IIIu	43600 000 000	CVV	(IVIPJ)
9264	M12	21-5 1920	Thu	124 1	CW	(HFD)
9264	M12	21-5 1920	Thu	124 1 8323 103 77246 74402 81831 34854 02449 91024 02311 83522 18109 43600 000 000	CW	(MPJ)
3116	M12	21-5 1940	Thu	124 1 8323 103 77246 74402 81831 34854 02449 91024 02311 83522 18109 43600 000 000	CW	(MPJ)
3116	M12	21-5 1940	Thu	124 1	CW	(HFD)
176	M12	27-5 1800	Wed	257 1 12 144 27515 55983 10700 43033 72038 stops, then: 257 1 22191 85840		(MPJ)
				(wrong msg?) (Ends) 15643 80790 52538 10930 80225 000 000		
7931	M12	27-5 1820		257 1 1113 144 27515 55983 10700	CW	(MPJ)
904	M12	27-5 1840	Wed	257 1 1113 144 27515 55983 10700	CW	(MPJ)
3047	M12	27-5 1900	Wed	463 1 8677 145 86106 64315 66407 46781 79672 73134 45476 98439 87672 93681 000 000	CW	(MPJ)
5802	M12	27-5 1920	Wed	463 1 8677 145 86106 64315 66407 46781 79672 73134 45476 98439 87672 93681 000 000	CW	(MPJ)
11435	M12	27-5 1930	Wed	1596 65 52434 63068 81975 66197 63245 20223 53165 85946 39422 45068 000	CW	(MPJ)
5788	M12	27-5 1940	Wed	463 1 8677 145 (?) 86106 64315 66407 46781 79672 33813	CW	(MPJ)
10598	M12	27-5 1940	Wed	1596 65 52434 63068 81975 66197 63245 20223 53165 85946 39422 45068 000		(MPJ)
.0330	IVIIZ		vveu	000	CVV	(1411.7)
.3926	M12	28-5 1310	Thu	919 1	CW	(HFD)
2126	M12	28-5 1330	Thu	919 1	CW	(HFD)
.0926	M12	28-5 1350	Thu	919 1	CW	(HFD)
.0343	M12	28-5 1900	Thu	124 1 2542 115 86409 51909 30385 29830 04641 75360 58495 74972 72266 82216 000 000	CW	(MPJ)
485	M14	1-5 1700	Fri	382 382 382 00000	MCW	(MPJ/HFD)
891	M14	1-5 1800	Fri	382 382 382 00000	MCW	(MPJ/HFD)
856	M14	12-5 1820	Tue	163 516 020 = #3378	CW	(HFD)
856	M14	12-5 1820	Tue	163 916 020 13378 14888 21551 14187 18085 13568 916 020 00000	CW	(AB)
8041	M14	26-5 0500	Tue	952 718 60 = 76722 88650 57571 30440 46554 49798 = 718 60 00000	CW	(AB)
8041	M14	27-5 0500	Wed	952 867 50 = 32268 58510 63022 71556 00869 79262 = = 867 50 00000	CW	(AB)
938	M14	27-5 1920	Wed	129 020 24145 84361 36102 54812 47213 47901 15272 93251 58217 12321 75319 54712 48912 24680 46714 37819 26712 73512 38192 42131 129 020 00000		(MPJ)
938	M14	27-5 1920	Wed	417 129 20 = 23105	CW	(HFD)
391	M21	1-5 1832	Fri	Russian Air Defence =992134??0?????	CW	(MPJ)
045	M21	17-5 2003	Sun	=99002??8????	CW	(JPL-Sib)
193	M32	2-5 1741	Sat	Q5YZ DE VJF5 K	CW	(JPL-Sib)
0684		4-5 1023		XXX XXX WEGI WEGI 68702 GLAZUHA 32626948	CW	(Eric)
		4-5 1025				
299	M32		Mon	WTX6 DE XZIU K. CM3U DE XZIU K. L1BP DE XZIU K. I2IW DE XZIU K	CW	(JPL-Sib)
134	M32	12-5 1013	Tue	TOC2 QTC K. TOC2 406 23 12 1310 406 T 993 = PPPPP JKMBL NCGPB PMPUI (Cont'd)	CW	(JPL-Sib)
931	M32	14-5 1009	Thu	LIT9 DE YA8B QTC K	CW	(Nige)
931	M32	14-5 1017	Thu	XXX XXX WEGI WEGI 56940 BOLAQIJ 8725 8486	CW	(Nige)
931	M32	14-5 1028	Thu	XXX XXX WEGI WEGI 28315 POMORAN 2362 0592	CW	(Nige)
931	M32	14-5 1502	Thu	LIT9 DE YA8B K. 5SCK DE YA8B K. F5KM DE YA8B K. BVFW DE YA8B K. WD9D DE YA8B K. KTPQ DE YA8B K. XTNB DE YA8B K RK	CW	(Nige)
931	M32	14-5 1514	Thu	XXX XXX WEGI WEGI 82859 ELEMENAT 5099 7987	CW	(Nige)
931	M32	14-5 1532	Thu	XXX XXX WEGI WEGI 74264 BALEEC 0279 7695 KALEDINEC 8497 7928	CW	(Nige)
078	M32	15-5 2020	Fri	i.p. 28117 16301 15076 K	CW	(JPL-Sib)
143	M32	18-5 2130	Mon	ICBI DE L3D8 K QTC L3D8 676 34 19 0027 676 = ZOW 450 = followed by 5fg message	CW	(Nige)
419	M32	18-5 2221	Mon	MAGU 201 15 19 0104 201 = 450 = MMMMM followed by 5lg message	CW	(Nige)
419	M32	18-5 2225	Mon	MAGU 870 23 19 0106 870 = 175 = MMMMM followed by 5lg message	CW	(Nige)
213	M32	18-5 2345	Mon	MVKP QSA 3 K. M16S DE IEC7 QSA L K. DE M16S QSA 2 QSA	CW	(JPL-Sib)
976	M32	19-5 0715	Tue	LDBO QTC 236 28 19 1010 236 = 696 = followed by 5lg message	CW	(Nige)
2787	M32	21-5 0817	Thu	VVVVV K KILB KSLB KSLBQTC K KSLB KSLB KSLB QTC AL KSLB KSLB XSLB 757 28 21	CW	(comp)
				11		,
288	M32	21-5 1600	Thu	QWQN: Russian Mil NCS, comms check with at least KYCK & QVTL. Then QTC for QVTL	CW	(MPJ)
		21-5 1107	Thu	26930: Russian Naval Air Transport: rjf94 rjc38 de 26930 qto 1100 qrd XLMV XLWF	CW	(WP3)
816	M32b			qbd 5000 qre 1400 k		
	M32b M32c	4-5 0625	Mon	W-markers	CW	(WP3)
3816 3029 3029			Mon Mon	·	CW CW	(WP3) (Tom)

Freq.	Code	Date	UTC	Day	Remarks	Mode	Ctrb
8895	M32c		0900	Sat	W-markers: Tu-95MS Bear H net	CW	(Tom)
8895	M32c	14-5		Thu	W-markers and G-markers: Tu-95MS Bear H net	CW	(Tom)
8895	M32c	14-5		Thu	Ü-markers: Tu-95MS Bear H net	CW	(Tom)
9128	M32c	14-5		Thu	TV6P DE QYYI QTC K. QYYI = 188 215 466 337 830 408 K. P7YR DE QYYI K	CW	(Tom)
8895	M32c	15-5		Fri	W-markers: Tu-95MS Bear H net	CW	(AB)
17431	M42c		1200	Sat	Russian diplo/intel. Null msg: 00000++++++++162)5761	FSK 200/500	(HFD)
15827	M42c		1210	Sat	Russian diplo/intel. Null msg: 00000+++++++++162)5761	FSK 200/500	(HFD)
13376	M42c		1220	Sat	Russian diplo/intel. Null msg: 00000++++++++162)5761	FSK 200/500	(HFD)
15804	M42c		1810	Sat	Russian diplo/intel. Null msg: 00000+++++++++162)5761	FSK 200/500	(AB)
13510	M42c		1820	Sat	Russian diplo/intel. Null msg: 00000+++++++++162)5761	FSK 200/500	(AB)
11129	M42c		1830	Sat	Russian diplo/intel. Null msg: 00000++++++++162)5761	FSK 200/500	(AB)
10765	M42c		1900	Thu	Russian diplo/intel. RYRYRY 00000++++++++162)5761	FSK 200/500	(AB/HFD)
8116	M42c		1910	Thu	Russian diplo/intel. RYRYRY 00000++++++++162)5761	FSK 200/500	(AB/HFD)
5785	M42c		1920	Thu	Russian diplo/intel. RYRYRY 00000++++++++162)5761	FSK 200/500	(AB/HFD)
15804	M42c		1810	Sat	Russian diplo/intel. RYRYRY 00000++++++++162)5761	FSK 200/500	(AB)
13510	M42c		1820	Sat	Russian diplo/intel. RYRYRY 00000++++++++162)5761	FSK 200/500	(AB)
11129	M42c		1830	Sat	Russian diplo/intel. RYRYRY 00000++++++++162)5761	FSK 200/500	(AB)
10765	M42c	14-5		Thu	Russian diplo/intel. RYRYRY 00000++++++++162)5761	FSK 200/500	(AB)
8116	M42c	14-5		Thu	Russian diplo/intel. RYRYRY 00000++++++++162)5761	FSK 200/500	(AB)
5785	M42c	14-5		Thu	Russian diplo/intel. RYRYRY 00000++++++++162)5761	FSK 200/500	(AB/MPJ)
15806	M42c	16-5		Sat	Russian diplo/intel.	FSK 200/500	(HFD)
13512	M42c	16-5		Sat	Russian diplo/intel.	FSK 200/500	(HFD)
11131	M42c	16-5		Sat	Russian diplo/intel.	FSK 200/500	(HFD)
10765	M42c	21-5		Thu	Russian diplo/intel. RYRYRY 00000++++++++162)5761	FSK 200/500	(AB)
8116	M42c	21-5		Thu	Russian diplo/intel. RYRYRY 00000++++++++162)5761	FSK 200/500	(AB)
5785	M42c	21-5		Thu	Russian diplo/intel. RYRYRY 00000++++++++162)5761	FSK 200/500	(AB)
17429	M42c	23-5		Sat	Russian diplo/intel. RYRYRY 00000++++++++162)5761	FSK 200/500	(AB)
15825	M42c	23-5		Sat	Russian diplo/intel. RYRYRY 00000++++++++162)5761	FSK 200/500	(AB)
13374	M42c	23-5		Sat	Russian diplo/intel. RYRYRY 00000++++++++162)5761	FSK 200/500	(AB)
15804	M42c	23-5		Sat	Russian diplo/intel. RYRYRY 00000++++++++162)5761	FSK 200/500	(AB)
13510	M42c	23-5		Sat	Russian diplo/intel. RYRYRY 00000++++++++162)5761	FSK 200/500	(AB)
11129	M42c	23-5		Sat	Russian diplo/intel. RYRYRY 00000++++++++162)5761	FSK 200/500	(AB)
10765	M42c	28-5		Thu	Russian diplo/intel. RYRYRY 00000++++++++162)5761	FSK 200/500	(AB/MPJ)
8116	M42c	28-5		Thu	Russian diplo/intel. RYRYRY 00000++++++++162)5761	FSK 200/500	(AB/MPJ)
5785	M42c	28-5		Thu	Russian diplo/intel. RYRYRY 00000++++++++162)5761	FSK 200/500	(AB/MPJ)
17429	M42c	30-5		Sat	Russian diplo/intel. RYRYRY 00000+++++++++162)5761	FSK 200/500	(AB)
15825	M42c	30-5		Sat	Russian diplo/intel. RYRYRY 00000++++++++162)5761	FSK 200/500	(AB)
13374	M42c	30-5		Sat	Russian diplo/intel. RYRYRY 00000++++++++162)5761	FSK 200/500	(AB)
15804	M42c	30-5		Sat	Russian diplo/intel. RYRYRY 00000++++++++162)5761	FSK 200/500	(AB)
13510	M42c	30-5		Sat	Russian diplo/intel. RYRYRY 00000++++++++162)5761	FSK 200/500	(AB)
11129	M42c	30-5		Sat	Russian diplo/intel. RYRYRY 00000++++++++162)5761	FSK 200/500	(AB)
9269	M42d		0700	Fri	Russian diplo/intel. Msg 162 on link 45136	FSK 200/1000	(AB)
11161	M42d	1-5	0700	Fri	Russian diplo/intel. Msg 162 on link 45136	FSK 200/1000	(AB)
19137	M42d		1100	Sat	Russian diplo/intel. Msg 032 on link 36882	FSK 200/1000	(AB)
16352	M42d		1110	Sat	Russian diplo/intel. Msg 032 on link 36882	FSK 200/1000	(AB)
14611	M42d		1120	Sat	Russian diplo/intel. Msg 032 on link 36882	FSK 200/1000	(AB)
11161	M42d	4-5	0700	Mon	Russian diplo/intel. Msg 225 on link 45136	FSK 200/1000	(AB)
9269	M42d	4-5	0710	Mon	Russian diplo/intel. Msg 225 on link 45136	FSK 200/1000	(AB)
7530	M42d	4-5	0720	Mon	Russian diplo/intel. Msg 225 on link 45136	FSK 200/1000	(AB)
11161	M42d	6-5	0700	Wed	Russian diplo/intel. Msg 232 on link 45136	FSK 200/1000	(AB)
9269	M42d	6-5	0710	Wed	Russian diplo/intel. Msg 232 on link 45136	FSK 200/1000	(AB)
7530	M42d	6-5	0720	Wed	Russian diplo/intel. Msg 232 on link 45136	FSK 200/1000	(AB)
17428	M42d	6-5	1230	Wed	Russian diplo/intel. Msg 002 on link 53277	FSK 200/1000	(AB)
15812	M42d	6-5	1240	Wed	Russian diplo/intel. Msg 002 on link 53277	FSK 200/1000	(AB)
13485	M42d		1250	Wed	Russian diplo/intel. Msg 002 on link 53277	FSK 200/1000	(AB)
15812	M42d	7-5	1330	Thu	Russian diplo/intel. Msg 015 on link 49237	FSK 200/1000	(AB)
13409	M42d		1340	Thu	Russian diplo/intel. Msg 015 on link 49237	FSK 200/1000	(AB)
11144	M42d		1350	Thu	Russian diplo/intel. Msg 015 on link 49237	FSK 200/1000	(AB)
11161	M42d		0700	Fri	Russian diplo/intel. Msg 195 on link 45136	FSK 200/1000	(AB)
9269	M42d		0710	Fri	Russian diplo/intel. Msg 195 on link 45136	FSK 200/1000	(AB)
7530	M42d		0720	Fri	Russian diplo/intel. Msg 195 on link 45136	FSK 200/1000	(AB)
17481	M42d	10-5		Sun	Russian diplo/intel. Msg 020 on link 45115	FSK 200/1000	(AB)
					,0		` '

Eran	Codo	Data LITC	Davi	Pomarks	Mode	Ctrh
Freq.	Code	Date UTC	Day	Remarks Proving dials (intel Mag 020 on link 45115	Mode	Ctrb
15826	M42d	10-5 0810	Sun	Russian diplo/intel. Msg 020 on link 45115	FSK 200/1000	(AB)
13418	M42d	10-5 0820	Sun	Russian diplo/intel. Msg 020 on link 45115	FSK 200/1000	(AB)
17424	M42d	10-5 0900	Sun	Russian diplo/intel. Msg 177 on link 45057	FSK 200/1000	(AB)
15816	M42d	10-5 0910	Sun	Russian diplo/intel. Msg 177 on link 45057	FSK 200/1000	(AB)
16352	M42d	10-5 0920	Sun	Russian diplo/intel. Msg 035 on link 36882	FSK 200/1000	(AB)
13394	M42d	10-5 0920	Sun	Russian diplo/intel. Msg 177 on link 45057	FSK 200/1000	(AB)
14611	M42d	10-5 0930	Sun	Russian diplo/intel. Msg 035 on link 36882	FSK 200/1000	(AB)
11161	M42d	11-5 0700	Mon	Russian diplo/intel. Msg 240 on link 45136	FSK 200/1000	(AB)
9269	M42d	11-5 0710	Mon	Russian diplo/intel. Msg 240 on link 45136	FSK 200/1000	(AB)
7530	M42d	11-5 0720	Mon	Russian diplo/intel. Msg 240 on link 45136	FSK 200/1000	(AB)
10521	M42d	11-5 1200	Mon	Russian diplo/intel. Msg 240 on link 45136	FSK 200/1000	(AB)
8127	M42d	11-5 1210	Mon	Russian diplo/intel. Msg 240 on link 45136	FSK 200/1000	(AB)
6945	M42d	11-5 1220	Mon	Russian diplo/intel. Msg 240 on link 45136	FSK 200/1000	(AB)
15836	M42d	11-5 1540	Mon	Russian diplo/intel. Msg 122 on link 20501	FSK 200/1000	(AB)
13424	M42d	11-5 1550	Mon	Russian diplo/intel. Msg 122 on link 20501	FSK 200/1000	(AB)
19607	M42d	12-5 1400	Tue	Russian diplo/intel. Msg 090 on link 32799	FSK 200/1000	(AB)
17459	M42d	12-5 1410	Tue	Russian diplo/intel. Msg 090 on link 32799	FSK 200/1000	(AB)
15921	M42d	12-5 1420	Tue	Russian diplo/intel. Msg 090 on link 32799	FSK 200/1000	(AB/BW3)
17434	M42d	12-5 1650	Tue	Russian diplo/intel. Msg 140 on link 20501	FSK 200/1000	(AB)
15787	M42d	12-5 1700	Tue	Russian diplo/intel. Msg 140 on link 20501	FSK 200/1000	(AB)
13374	M42d	12-5 1700	Tue	Russian diplo/intel. Msg 140 on link 20501	FSK 200/1000	(AB)
				· · · · ·		
11427	M42d	12-5 2100	Tue	Russian diplo/intel. Msg 007 on link 45047	FSK 200/1000	(AB)
9254	M42d	12-5 2110	Tue	Russian diplo/intel. Msg 007 on link 45047	FSK 200/1000	(AB)
7689	M42d	12-5 2120	Tue	Russian diplo/intel. Msg 007 on link 45047	FSK 200/1000	(AB)
13376	M42d	12-5 2300	Tue	Russian diplo/intel.	FSK 200/1000	(BW3)
11094	M42d	12-5 2310	Tue	Russian diplo/intel.	FSK 200/1000	(BW3)
9127	M42d	12-5 2320	Tue	Russian diplo/intel.	FSK 200/1000	(BW3)
7530	M42d	13-5 0700	Wed	Russian diplo/intel. Msg 247 on link 45136	FSK 200/1000	(AB)
11161	M42d	13-5 0700	Wed	Russian diplo/intel. Msg 247 on link 45136	FSK 200/1000	(AB)
9269	M42d	13-5 0700	Wed	Russian diplo/intel. Msg 247 on link 45136	FSK 200/1000	(AB)
15991	M42d	13-5 0800	Wed	Russian diplo/intel. Msg 205 on link 45075	FSK 200/1000	(AB)
13579	M42d	13-5 0810	Wed	Russian diplo/intel. Msg 205 on link 45075	FSK 200/1000	(AB)
11492	M42d	13-5 0820	Wed	Russian diplo/intel. Msg 205 on link 45075	FSK 200/1000	(AB)
7530	M42d	14-5 0700	Thu	Russian diplo/intel. Msg 002 on link 45136	FSK 200/1000	(AB)
11161	M42d	14-5 0700	Thu	Russian diplo/intel. Msg 002 on link 45136	FSK 200/1000	(AB)
9269	M42d	14-5 0700	Thu	Russian diplo/intel. Msg 002 on link 45136	FSK 200/1000	(AB)
7530	M42d	15-5 0720	Fri	Russian diplo/intel. Msg 052 on link 45137	FSK 200/1000	(AB)
18749	M42d	16-5 2100	Sat	Russian diplo/intel. Msg 053 on link 32821	FSK 200/1000	(AB)
16172	M42d	16-5 2110	Sat	Russian diplo/intel. Msg 053 on link 32821	FSK 200/1000	(AB)
14561	M42d	16-5 2120	Sat	Russian diplo/intel. Msg 053 on link 32821	FSK 200/1000	(AB)
17431	M42d	17-5 1457	Sun	Russian diplo/intel	FSK 200/1000	(comp)
17431	M42d	17-5 1530	Sun	Russian diplo/intel. Msg 125 on link 20501	FSK 200/1000	(AB)
15836	M42d	17-5 1540	Sun	Russian diplo/intel. Msg 125 on link 20501	FSK 200/1000	(AB)
13424	M42d	17-5 1550	Sun	Russian diplo/intel. Msg 125 on link 20501	FSK 200/1000	(AB)
11161	M42d	18-5 0700	Mon	Russian diplo/intel. Msg 007 on link 45136	FSK 200/1000	(AB)
9269	M42d	18-5 0700	Mon	Russian diplo/intel. Msg 007 on link 45136	FSK 200/1000 FSK 200/1000	(AB)
7530	M42d	18-5 0720	Mon	Russian diplo/intel. Msg 007 on link 45136	FSK 200/1000	(AB)
		18-5 1220				(AB)
6945	M42d		Mon	Russian diplo/intel. Msg 007 on link 45136	FSK 200/1000	
11161	M42d	19-5 0700	Tue	Russian diplo/intel. Msg 010 on link 45137	FSK 200/1000	(AB)
9269	M42d	19-5 0710	Tue	Russian diplo/intel. Msg 010 on link 45137	FSK 200/1000	(AB)
7530	M42d	19-5 0720	Tue	Russian diplo/intel. Msg 010 on link 45137	FSK 200/1000	(AB)
17459	M42d	19-5 1410	Tue	Russian diplo/intel. Msg 090 on link 32799	FSK 200/1000	(AB/MPJ)
15921	M42d	19-5 1420	Tue	Russian diplo/intel. Msg 090 on link 32799	FSK 200/1000	(AB)
17435	M42d	19-5 1650	Tue	Russian Diplo/Intel. Msg NR140/15th Type 07145 GR174 on Link 20501: 27092 32274 05069 13340 32012 02476 13506 08217	FSK 200/1000	(MPJ)
15789	M42d	19-5 1700	Tue	Russian Diplo/Intel. Msg NR140/15th Type 07145 GR174 on Link 20501: 27092 32274 05069 13340 32012 02476 13506 08217	FSK 200/1000	(MPJ)
13376	M42d	19-5 1710	Tue	Russian Diplo/Intel. Msg NR140/15th Type 07145 GR174 on Link 20501: 27092 32274 05069 13340 32012 02476 13506 08217	FSK 200/1000	(MPJ)
11161	M42d	20-5 0700	Wed	Russian diplo/intel. Msg 015 on link 45137	FSK 200/1000	(AB)
9269	M42d	20-5 0710	Wed	Russian diplo/intel. Msg 015 on link 45137	FSK 200/1000	(AB)
7530	M42d	20-5 0720	Wed	Russian diplo/intel. Msg 015 on link 45137	FSK 200/1000	(AB)

Funa	Cada	Data LITC	Day	Domanica	Mada	Chulb
Freq.	Code	Date UTC	Day	Remarks Pussion diale listed Mag 140 on link 45075	Mode	Ctrb
15991	M42d	20-5 0800	Wed	Russian diplo/intel. Msg 140 on link 45075	FSK 200/1000	(AB)
13579	M42d	20-5 0810	Wed	Russian diplo/intel. Msg 140 on link 45075	FSK 200/1000	(AB)
11429	M42d	20-5 0820	Wed	Russian diplo/intel. Msg 140 on link 45075	FSK 200/1000	(AB)
10521	M42d	20-5 1200	Wed	Russian diplo/intel. Msg 015 on link 45137	FSK 200/1000	(AB)
8127	M42d	20-5 1210	Wed	Russian diplo/intel. Msg 015 on link 45137	FSK 200/1000	(AB)
6945	M42d	20-5 1220	Wed	Russian diplo/intel. Msg 015 on link 45137	FSK 200/1000	(AB)
17428	M42d	20-5 1230	Wed	Russian diplo/intel. Msg 224 on link 61759	FSK 200/1000	(AB)
15812	M42d	20-5 1240	Wed	Russian diplo/intel. Msg 224 on link 61759	FSK 200/1000	(AB)
13485	M42d	20-5 1250	Wed	Russian diplo/intel. Msg 224 on link 61759	FSK 200/1000	(AB)
17434	M42d	20-5 1650	Wed	Russian diplo/intel. Msg 140 on link 20501	FSK 200/1000	(AB)
15787	M42d	20-5 1700	Wed	Russian diplo/intel. Msg 140 on link 20501	FSK 200/1000	(AB/BW3)
13374	M42d	20-5 1710	Wed	Russian diplo/intel. Msg 140 on link 20501	FSK 200/1000	(AB)
11161	M42d	21-5 0700	Thu	Russian diplo/intel. Msg 017 on link 45136	FSK 200/1000	(AB)
9269	M42d	21-5 0710	Thu	Russian diplo/intel. Msg 017 on link 45136	FSK 200/1000	(AB)
7530	M42d	21-5 0720	Thu	Russian diplo/intel. Msg 017 on link 45136	FSK 200/1000	(AB)
10521	M42d	21-5 1200	Thu	Russian diplo/intel. Msg 017 on link 45136	FSK 200/1000	(AB)
8127	M42d	21-5 1210	Thu	Russian diplo/intel. Msg 017 on link 45136	FSK 200/1000	(AB)
6945	M42d	21-5 1220	Thu	Russian diplo/intel. Msg 017 on link 45136	FSK 200/1000	(AB)
16187	M42d	22-5 0600	Fri	Russian diplo/intel. Msg 127 on link 40988	FSK 200/1000	(AB)
14406	M42d	22-5 0610	Fri	Russian diplo/intel. Msg 127 on link 40988	FSK 200/1000	(AB)
12189	M42d	22-5 0620	Fri	Russian diplo/intel. Msg 127 on link 40988	FSK 200/1000	(AB)
11161	M42d	22-5 0700	Fri	Russian diplo/intel. Msg 112 on link 45137	FSK 200/1000	(AB)
9269	M42d	22-5 0710	Fri	Russian diplo/intel. Msg 112 on link 45137	FSK 200/1000	(AB)
7530	M42d	22-5 0720	Fri	Russian diplo/intel. Msg 112 on link 45137	FSK 200/1000	(AB)
17481	M42d	23-5 0800	Sat	Russian diplo/intel. Msg 020 on link 45115	FSK 200/1000	(AB)
15826	M42d	23-5 0820	Sat	Russian diplo/intel. Msg 020 on link 45115	FSK 200/1000	(AB)
13418	M42d	23-5 0840	Sat	Russian diplo/intel. Msg 020 on link 45115	FSK 200/1000	(AB)
17424	M42d	23-5 0900	Sat	Russian diplo/intel. Msg 177 on link 45057	FSK 200/1000	(AB)
15816	M42d	23-5 0910	Sat	Russian diplo/intel. Msg 177 on link 45057	FSK 200/1000	(AB)
13394 19137	M42d M42d	23-5 0920 23-5 1100	Sat	Russian diplo/intel. Msg 177 on link 45057	FSK 200/1000	(AB)
16352	M42d	23-5 1100	Sat Sat	Russian diplo/intel. Msg 040 on link 36882	FSK 200/1000 FSK 200/1000	(AB)
14611	M42d	23-5 1110	Sat	Russian diplo/intel. Msg 040 on link 36882	FSK 200/1000 FSK 200/1000	(AB)
18749	M42d	23-5 2100	Sat	Russian diplo/intel. Msg 040 on link 36882 Russian diplo/intel. Msg 002 on link 32821	FSK 200/1000 FSK 200/1000	(AB)
16172	M42d	23-5 2100	Sat	Russian diplo/intel. Msg 002 on link 32821	FSK 200/1000 FSK 200/1000	(AB)
14561	M42d	23-5 2110	Sat	Russian diplo/intel. Msg 002 on link 32821	FSK 200/1000 FSK 200/1000	(AB)
17481	M42d	24-5 0800	Sun	Russian diplo/intel. Msg 000 on link 45115	FSK 200/1000	(AB)
15826	M42d	24-5 0800	Sun	Russian diplo/intel. Msg 020 on link 45115	FSK 200/1000	(AB)
13418	M42d	24-5 0820	Sun	Russian diplo/intel. Msg 020 on link 45115	FSK 200/1000	(AB)
17424	M42d	24-5 0900	Sun	Russian diplo/intel. Msg 177 on link 45057	FSK 200/1000	(AB)
15816	M42d	24-5 0910	Sun	Russian diplo/intel. Msg 177 on link 45057	FSK 200/1000	(AB)
13394	M42d	24-5 0920	Sun	Russian diplo/intel. Msg 177 on link 45057	FSK 200/1000	(AB)
19137	M42d	24-5 1100	Sun	Russian diplo/intel. Msg 040 on link 36882	FSK 200/1000 FSK 200/1000	(AB)
17433	M42d	24-5 1530	Sun	Russian diplo/intel. Msg 127 on link 20501	FSK 200/1000	(AB)
15838	M42d	24-5 1540	Sun	Russian diplo/intel. Msg 127 on link 20501	FSK 200/1000	(AB/MPJ)
13426	M42d	24-5 1550	Sun	Russian diplo/intel. Msg 127 on link 20501	FSK 200/1000	(AB/MPJ)
11161	M42d	25-5 0700	Mon	Russian diplo/intel. Msg 022 on link 45137	FSK 200/1000	(AB)
9269	M42d	25-5 0710	Mon	Russian diplo/intel. Msg 022 on link 45137	FSK 200/1000	(AB)
7530	M42d	25-5 0720	Mon	Russian diplo/intel. Msg 022 on link 45137	FSK 200/1000	(AB)
10521	M42d	25-5 1200	Mon	Russian diplo/intel. Msg 022 on link 45137	FSK 200/1000	(AB)
8127	M42d	25-5 1210	Mon	Russian diplo/intel. Msg 022 on link 45137	FSK 200/1000	(AB)
7530	M42d	26-5 0720	Tue	Russian diplo/intel. Msg 025 on link 45136	FSK 200/1000	(AB)
10521	M42d	26-5 1200	Tue	Russian diplo/intel. Not decoded, incorrect shift (should be 1000)	FSK 200/500	(AB)
6945	M42d	26-5 1220	Tue	Russian diplo/intel. Not decoded, incorrect shift (should be 1000)	FSK 200/500	(AB)
19607	M42d	26-5 1400	Tue	Russian diplo/intel. Msg 002 on link 32799	FSK 200/1000	(AB)
17459	M42d	26-5 1410	Tue	Russian diplo/intel. Msg 002 on link 32791	FSK 200/1000	(AB)
15921	M42d	26-5 1420	Tue	Russian diplo/intel. Msg 002 on link 32799	FSK 200/1000	(AB)
17434	M42d	26-5 1650	Tue	Russian diplo/intel. Msg 002 on link 20501	FSK 200/1000	(AB)
15787	M42d	26-5 1700	Tue	Russian diplo/intel. Msg 002 on link 20501	FSK 200/1000	(AB)
13374	M42d	26-5 1710	Tue	Russian diplo/intel. Msg 002 on link 20501	FSK 200/1000	(AB)
11427	M42d	26-5 2050	Tue	Russian diplo/intel. Test started with an incorrect shift (500Hz) then switched to	FSK 200/1000	(AB)
				1000Hz		

Freq.	Code	Date UTC	Day	Remarks	Mode	Ctrb
11427	M42d	26-5 2100	Tue	Russian diplo/intel. Msg 002 on link 45057	FSK 200/1000	(AB)
9254	M42d	26-5 2110	Tue	Russian diplo/intel. Msg 002 on link 45057	FSK 200/1000	(AB)
7689	M42d	26-5 2120	Tue	Russian diplo/intel. Msg 002 on link 45057	FSK 200/1000	(AB)
11161	M42d	27-5 0700	Wed	Russian diplo/intel. Msg 030 on link 45137	FSK 200/1000	(AB)
9269	M42d	27-5 0710	Wed	Russian diplo/intel. Msg 030 on link 45137	FSK 200/1000	(AB)
7530	M42d	27-5 0720	Wed	Russian diplo/intel. Msg 030 on link 45137	FSK 200/1000	(AB)
15991	M42d	27-5 0800	Wed	Russian diplo/intel. Msg 002 on link 45075	FSK 200/1000	(AB)
13579	M42d	27-5 0810	Wed	Russian diplo/intel. Msg 002 on link 45075	FSK 200/1000	(AB)
11492	M42d	27-5 0820	Wed	Russian diplo/intel. Msg 002 on link 45075	FSK 200/1000	(AB)
15863	M42d	27-5 0925	Wed	Russian diplo/intel. Msg 002 on link 20492	FSK 200/1000	(AB)
10521	M42d	27-5 1200	Wed	Russian diplo/intel. NR030/26th Type 07145 GR203 on Link 47158. 25277 09671 06681 15273 01150 03886 53297 12535 Weak	FSK 200/1000	(AB/MPJ)
8127	M42d	27-5 1210	Wed	Russian diplo/intel. Barely audible	FSK 200/1000	(AB)
16187	M42d	28-5 0600	Thu	Russian diplo/intel. Msg 130 on link 40988	FSK 200/1000	(AB)
14406	M42d	28-5 0610	Thu	Russian diplo/intel. Msg 130 on link 40988	FSK 200/1000	(AB)
12189	M42d	28-5 0620	Thu	Russian diplo/intel. Msg 130 on link 40988	FSK 200/1000	(AB)
11161	M42d	28-5 0700	Thu	Russian diplo/intel. Msg 032 on link 45136	FSK 200/1000	(AB)
9269	M42d	28-5 0710	Thu	Russian diplo/intel. Msg 032 on link 45136	FSK 200/1000	(AB)
7530	M42d	28-5 0720	Thu	Russian diplo/intel. Msg 032 on link 45136	FSK 200/1000	(AB)
10521	M42d	28-5 1200	Thu	Russian diplo/intel. Msg 032 on link 45136	FSK 200/1000	(AB)
8127	M42d	28-5 1210	Thu	Russian diplo/intel. Msg 032 on link 45136	FSK 200/1000	(AB)
6945	M42d	28-5 1220	Thu	Russian diplo/intel. Msg 032 on link 45136	FSK 200/1000	(AB)
15812	M42d	28-5 1330	Thu	Russian diplo/intel. Msg 162 on link 49237	FSK 200/1000	(AB)
13409	M42d	28-5 1340	Thu	Russian diplo/intel. Msg 162 on link 49237	FSK 200/1000	(AB)
11144	M42d	28-5 1350	Thu	Russian diplo/intel. Msg 162 on link 49237	FSK 200/1000	(AB)
11161	M42d	29-5 0700	Fri	Russian diplo/intel. Msg 195 on link 45137	FSK 200/1000	(AB)
9269	M42d	29-5 0710	Fri	Russian diplo/intel. Msg 195 on link 45137	FSK 200/1000	(AB)
7530	M42d	29-5 0720	Fri	Russian diplo/intel. Msg 195 on link 45137	FSK 200/1000	(AB)
19137	M42d	30-5 1100	Sat	Russian diplo/intel. Msg 042 on link 36882	FSK 200/1000	(AB)
16352	M42d	30-5 1110	Sat	Russian diplo/intel. Msg 042 on link 36882	FSK 200/1000	(AB)
14611	M42d	30-5 1120	Sat	Russian diplo/intel. Msg 042 on link 36882	FSK 200/1000	(AB)
16172	M42d	30-5 2110	Sat	Russian diplo/intel. Msg 002 on link 32821	FSK 200/1000	(AB)
14561	M42d	30-5 2120	Sat	Russian diplo/intel. Msg 002 on link 32821	FSK 200/1000	(AB)
19137	M42d	31-5 1100	Sun	Russian diplo/intel. Msg 042 on link 36882	FSK 200/1000	(AB)
16352	M42d	31-5 1110	Sun	Russian diplo/intel. Msg 042 on link 36882	FSK 200/1000	(AB)
14611	M42d	31-5 1120	Sun	Russian diplo/intel. Msg 042 on link 36882	FSK 200/1000	(AB)
17431	M42d	31-5 1530	Sun	Russian diplo/intel. Msg 002 on link 20501	FSK 200/1000	(AB/MPJ)
15836	M42d	31-5 1540	Sun	Russian diplo/intel. Msg 002 on link 20501	FSK 200/1000	(AB/MPJ)
13424	M42d	31-5 1550	Sun	Russian diplo/intel. Msg 002 on link 20501	FSK 200/1000	(AB/MPJ)
5453	M51	4-5 0726	Mon	French MIL Intel via CNMO TSR Favibres-Vernon: NR 20 M 04 09:26:53 2015 =	CW	(Danix)
				SNDGS BFUAE //7437 kHz		
7437	M51	4-5 0726	Mon	French MIL Intel via CNMO TSR FaviPres-Vernon: NR 20 M 04 09:26:53 2015 = SNDGS BFUAE //5453 kHz	CW	(Danix)
6825	M51	4-5 0806	Mon	French MIL Intel via CNMO TSR FaviÞres-Vernon: NR 69 M 05 10:06:32 2015 = RKCBD AROYG //3881 kHz	CW	(Danix)
3881	M51	4-5 0806	Mon	French MIL Intel via CNMO TSR FaviÞres-Vernon: NR 69 M 05 10:06:32 2015 = RKCBD AROYG //6825 kHz	CW	(Danix)
4483.7	M51	4-5 1436	Mon	French MIL Intel via CNMO TSR FaviÞres-Vernon: NR 76 M 04 16:37:21 2015 = SNUWB RKCDR //9213 kHz	CW	(Danix)
9213	M51	4-5 1436	Mon	French MIL Intel via CNMO TSR FaviÞres-Vernon: NR 76 M 04 16:37:21 2015 = SNUWB RKCDR //4483.7 kHz	CW	(Danix)
9407	M51	5-5 1446	Tue	French MIL Intel via CNMO TSR FaviPres-Vernon: NR 29 M 05 16:47:16 2015 = XGIBE LWQOY //8032 kHz	CW	(Danix)
8032	M51	5-5 1446	Tue	French MIL Intel via CNMO TSR FaviPres-Vernon: NR 29 M 05 16:47:16 2015 = XGIBE LWQOY //9407 kHz	CW	(Danix)
7529	M51	6-5 1406	Wed	French MIL Intel via CNMO TSR FaviÞres-Vernon: NR 62 M 06 16:06:44 2015 =	CW	(Danix)
9461	M51	8-5 1309	Fri	KITFZ UYYMN French MIL Intel via CNMO TSR FaviÞres-Vernon: NR 11 M 07 15:09:41 2015 =	CW	(Danix)
9434	M51	8-5 1309	Fri	YQXSV KDLPD //9434 kHz French MIL Intel via CNMO TSR FaviPres-Vernon: NR 11 M 07 15:09:41 2015 =	CW	(Danix)
6234.5	M51	9-5 1600	Sat	YQXSV KDLPD //9461 kHz French MIL Intel via CNMO TSR FaviPres-Vernon: NR 06 M 07 18:01:14 2015 =	CW	(Danix)
0434.3	IVIJI	2-3 IOOO	Jal	FLARH BEEQZ //5869 kHz	CVV	(Danix)

Sept M51	Freq.	Code	Date UTC	Day	Remarks	Mode	Ctrb
FLAME MSC 11-5 0738 Mon Perch MIL Interfel ASS MSC Perch MIL Interfel ASS	-			•			
CHIND JALLES //SESS NHT					FLARH BEEQZ //6234.5 kHz		
Ching Chin	3881	M51	11-5 0/38	IVION		CW	(Danix)
	6825	M51	11-5 0738	Mon		CW	(Danix)
Main Mile	6825	M51	17-5 1626	Sun		CW	(Danix)
Month Mont	3881	M51	17-5 1626	Sun	French MIL/Intel, CNMO TSR Favieres-Vernon: NR 10 M 12 18:26:52 2015 = EIUTX	CW	(Danix)
September Sept	9213	M51	18-5 1402	Mon	French MIL/Intel, CNMO TSR Favieres-Vernon: NR 72 M 18 16:03:20 2015 =	CW	(Danix)
1981 195 1018 195 1018 1018 1019 1010 1019 10	6825	M51	19-5 1018	Tue	French MIL/Intel, CNMO TSR Favieres-Vernon: NR 86 M 19 12:19:10 2015 = RGLDQ	CW	(Danix)
Sept M51	3881	M51	19-5 1018	Tue	French MIL/Intel, CNMO TSR Favieres-Vernon: NR 86 M 19 12:19:10 2015 = RGLDQ	CW	(Danix)
MS1	9057	M51	19-5 1214	Tue	French MIL/Intel, CNMO TSR Favieres-Vernon: NR 10 M 19 14:15:26 2015 = KAHIV	CW	(Danix)
M51 20-5 0915 Wed French MIL/Intel, CNMO TSR Favieres-Vernor. JS881 kHz CW (Danix)	3881	M51	20-5 0915	Wed		CW	(Danix)
B106 M51 20-5 1611 Wed French MIL/Intel, CNMO TSR Favieres-Vernor: NR 03 M 20 18:12:19 2015 = BEXP CW (Danix)							· , ,
SAME MS 20-5 1611 Wed French MIL/Intel, CNMO TSR Favieres-Vernon: NR 03 M 20 18:12:19 2015 = BEXP CW (Danix)							<u> </u>
M51	0200						,==/
9461 M51 21-5 1359	6891	M51	20-5 1611	Wed	French MIL/Intel, CNMO TSR Favieres-Vernon: NR 03 M 20 18:12:19 2015 = BEIXP	CW	(Danix)
	9461	M51	21-5 1359	Thu	French MIL/Intel, CNMO TSR Favieres-Vernon: NR 28 M 21 15:59:53 2015 = BNZOX	CW	(Danix)
6853 M51 21-5 2037 Thu Training texts from FAV22. Started at 1827 UTC. CW (Danix) 6853 M51 22-5 2037 Fri Training texts from FAV22. Started on 21-5 at 1827 UTC.//F6853 kHz CW (Danix) 6825 M51 28-5 0959 Thu French MIL/Intel, CNMO TSR Favieres-Vernon: NR 08 M 28 11:59:12 2015 BT CW (Danix) 3881 M51 28-5 0959 Thu French MIL/Intel, CNMO TSR Favieres-Vernon: NR 08 M 28 11:59:12 2015 BT CW (Danix) 6845 M89 1-5 1001 Fri CQ (x3) DE DP91 (x2) V PSE KT FST KK LL TO HR AHR NIL SK GB //6845 CW (JPL) 9131 M89 1-5 1014 Fri V DKG (x3) DE DP91 (x2) V PSE KK FFF ST KK LL TO HR NIL SK GB //6845 CW (JPL) 9131 M89 1-5 1014 Fri V DKG (x3) DE DP91 (x2) V PSE KK FFF ST KK LL TO HR NIL SK GB //6845 CW (JPL) 9131 M89 1-5 1015 Fri V DKG (x3) DE ADS (x2) CW (JPL) 9600 M89	9434	M51	21-5 1359	Thu	French MIL/Intel, CNMO TSR Favieres-Vernon: NR 28 M 21 15:59:53 2015 = BNZOX	CW	(Danix)
7437 M51 22-5 2037 Fri Training texts from FAV22. Started on 21-5 at 1827 UTC. //6853 kHz CW (Danix) 6825 M51 28-5 0959 Thu French MIL/Intel, CNMO TSR Favieres-Vernon: NR 08 M 28 11:59:12 2015 BT CW (Danix) 3881 M51 28-5 0959 Thu French MIL/Intel, CNMO TSR Favieres-Vernon: NR 08 M 28 11:59:12 2015 BT CW (Danix) 6845 M89 1-5 1001 Fri CQ (x3) DE DP91 (x2) V PSE KK FFF ST KK LL TO HR NIL SK GB //8858 CW (JPL) 8858 M89 1-5 1014 Fri CQ (x3) DE DP91 (x2) V PSE KK FFF ST KK LL TO HR NIL SK GB //6845 CW (JPL) 9131 M89 1-5 1014 Fri V DKG (x3) DE JATO (x2) //10180 CW (JPL) 10180 M89 1-5 1015 Fri V DKG6 (x3) DE JATO (x2) //5801 CW (JPL) 10180 M89 1-5 1018 Fri V DKG6 (x3) DE JATO (x2) //5002 CW (JPL) 1010 M89 1-5 2043 <t< td=""><td>6853</td><td>M51</td><td>21-5 2037</td><td>Thu</td><td></td><td>CW</td><td>(Danix)</td></t<>	6853	M51	21-5 2037	Thu		CW	(Danix)
6825 M51 28-5 0959 Thu French MIL/Intel, CNMO TSR Favieres-Vernon: NR 08 M 28 11:59:12 2015 BT VBPLG TXXXD //3881 kHz CW (Danix) 3881 M51 28-5 0959 Thu French MIL/Intel, CNMO TSR Favieres-Vernon: NR 08 M 28 11:59:12 2015 BT VBPLG TXXXD //6825 kHz CW (IPL) 6845 M89 1-5 1004 Fri CQ (x3) DE DP91 (x2) V PSE FX FL TO HR AHR NIL SK GB //6845 CW (IPL) 9131 M89 1-5 1014 Fri V DKSL (x3) DE ADS (x2) //10180 CW (IPL) 9801 M89 1-5 1015 Fri V DKG6 (x3) DE 3A7D (x2) //75010 CW (IPL) 10180 M89 1-5 1015 Fri V DKG6 (x3) DE 3A7D (x2) //7502 CW (IPL) 3642 M89 1-5 2043 Fri V DKG6 (x3) DE 3A7D (x2) //7602 CW (IPL) 4520 M89 1-5 2043 Fri V DKG6 (x3) DE 3A7D (x2) //7602 CW (IPL) 4532 M89 1-5 2043 Fri V DKG6 (x3)	6853	M51	22-5 2037	Fri	Training texts from FAV22. Started on 21-5 at 1827 UTC. //7437 kHz	CW	(Danix)
NSPLICE TXXXD // 1881 kHz NSPLICE TXXXD // 1882 kHz French MIL/Intel, CNMO TSR Favieres-Vernon: NR 08 M 28 11:59:12 2015 BT CW (Danix)	7437	M51	22-5 2037	Fri	Training texts from FAV22. Started on 21-5 at 1827 UTC. //6853 kHz	CW	(Danix)
VBPLG TXXXD /6825 kHz	6825	M51	28-5 0959	Thu		CW	(Danix)
8858 M89 1-5 1004 Fri CQ (x3) DE DP91 (x2) V PSE KK FFF ST KK LL TO HR NIL SK GB //6845 CW (JPL) 91311 M89 1-5 1014 Fri V DKSL (x3) DE ALSK (x2) CW (JPL) 10180 M89 1-5 1015 Fri V DKG6 (x3) DE 3A7D (x2) //5801 CW (JPL) 8060 M89 1-5 1018 Fri V DKG6 (x3) DE 3A7D (x2) //5602 CW (JPL) 3642 M89 1-5 2043 Fri V DKG6 (x3) DE AA7D (x2) //7602 CW (JPL) 7602 M89 1-5 2043 Fri V DKG6 (x3) DE AA7D (x2) //7602 CW (JPL) 4532 M89 1-5 2043 Fri V DKG6 (x3) DE RIS9 (x2) //3777 CW (JPL) 4532 M89 1-5 2058 Fri V MBJF (x3) DE RIS9 (x2) //4532 CW (JPL) 3777 M89 1-5 2058 Fri V MBJF (x3) DE ALSK (x2) //10947 CW (JPL) 19047 M89	3881	M51	28-5 0959	Thu		CW	(Danix)
9131 M89 1-5 1014 Fri V DKSL (x3) DE ALSK (x2) M89 1-5 1015 Fri V DKG6 (x3) DE 3A7D (x2) //10180 CW (JPL) M89 1-5 1015 Fri V DKG6 (x3) DE 3A7D (x2) //5801 CW (JPL) M89 1-5 1018 Fri V DKG6 (x3) DE AS7D (x2) //5801 CW (JPL) M89 1-5 1018 Fri V DKG6 (x3) DE AS7D (x2) //5802 CW (JPL) M89 1-5 2043 Fri V DKG6 (x3) DE AS7D (x2) //7602 CW (JPL) M89 1-5 2043 Fri V DKG6 (x3) DE 3A7D (x2) //7602 CW (JPL) M89 1-5 2043 Fri V DKG6 (x3) DE AS7D (x2) //7602 CW (JPL) M89 1-5 2048 Fri V DKG6 (x3) DE AS7D (x2) //3642 CW (JPL) M89 1-5 2058 Fri KDJY DE BEKJ R RPT 69W TO 70W K. R QSL 0454 K (Switched to voice) //7602 CW (JPL) M89 1-5 2058 Fri V MBJF (x3) DE RIS9 (x2) //3777 CW (JPL) M89 1-5 2058 Fri V MBJF (x3) DE RIS9 (x2) //4532 CW (JPL) M89 1-5 2058 Fri V MBJF (x3) DE RIS9 (x2) //4532 CW (JPL) M89 1-5 2058 Fri V MBJF (x3) DE RIS9 (x2) //4532 CW (JPL) M89 1-5 2058 Fri V MBJF (x3) DE ALSK (x2) //4532 CW (JPL) M89 1-5 2058 Fri V MBJF (x3) DE ALSK (x2) //4532 CW (JPL) M89 1-5 2058 Fri V MBJF (x3) DE ALSK (x2) //4532 CW (JPL) M89 1-5 0147 Sat V DKG6 (x3) DE ALSK (x2) //10947 CW (JPL) M89 1-5 0147 Sat V DKSL (x3) DE ALSK (x2) //10947 CW (JPL) M89 2-5 0149 Sat V DKG6 (x3) DE ALSK (x2) //10947 CW (JPL) M89 2-5 0149 Sat CQ (x3) DE DP91 (x2) V HR NIL SK GB //6845 CW (JPL) M89 2-5 0916 Sat V DKG6 (x3) DE AS7D (x2) //5801 CW (JPL) M89 2-5 0912 Sat V DKG6 (x3) DE ASAD (x2) //5801 CW (JPL) M89 2-5 0922 Sat V DKG6 (x3) DE ASAD (x2) //5801 CW (JPL) M89 2-5 0922 Sat V DKG6 (x3) DE ASAD (x2) //5801 CW (JPL) M89 2-5 0922 Sat V DKG6 (x3) DE ASAD (x2) //5801 CW (JPL) M89 2-5 1315 Sat CQ (x3) DE DP91 (x2) V HR NIL SK GB //6845 CW (JPL) M89 2-5 1315 Sat V DKG6 (x3) DE ASAD (x2) //5801 CW (JPL) M89 2-5 1315 Sat V DKG6 (x3) DE ASPO (x2) //5801 CW (JPL) M89 2-5 1315 Sat V DKG6 (x3) DE ASPO (x2) //5802 CW (JPL) M89 2-5 1315 Sat V DKG6 (x3) DE ASPO (x2) //5802 CW (JPL) M89 2-5 1315 Sat V DKG6 (x3) DE ASPO (x2) //5802 CW (JPL) M89 2-5 1315 Sat V DKG6 (x3) DE ASPO (x2) //5802 CW (JPL) M89 2-5 1310 Sat V DKG6 (x3) DE ASPO (x2) /	6845	M89	1-5 1001	Fri	CQ (x3) DE DP91 (x2) V PSE FV LL TO HR AHR NIL SK GB //8858	CW	(JPL)
5801 M89 1-5 1015 Fri V DKGG (x3) DE 3A7D (x2) //10180 CW (JPL) 10180 M89 1-5 1015 Fri V DKGG (x3) DE 3A7D (x2) //5801 CW (JPL) 8060 M89 1-5 1018 Fri V DKGG (x3) DE 3A7D (x2) //7602 CW (JPL) 7602 M89 1-5 2043 Fri V DKGG (x3) DE 3A7D (x2) //7602 CW (JPL) 3788 M89 1-5 2043 Fri V DKGG (x3) DE 3A7D (x2) //3642 CW (JPL) 3788 M89 1-5 2045 Fri V DKGG (x3) DE 3A7D (x2) //3777 CW (JPL) 4532 M89 1-5 2058 Fri V DKJE (x3) DE RISS (x2) //3777 CW (JPL) 3777 M89 1-5 2058 Fri V DKJE (x3) DE ALSK (x2) //3797 CW (JPL) 3777 M89 2-5 0147 Sat V DKGE (x3) DE ALSK (x2) //4532 CW (JPL) 1947 M89 2-5	8858	M89	1-5 1004	Fri	CQ (x3) DE DP91 (x2) V PSE KK FFF ST KK LL TO HR NIL SK GB //6845	CW	(JPL)
10180 M89	9131	M89	1-5 1014	Fri	V DKSL (x3) DE ALSK (x2)	CW	(JPL)
8060 M89 1-5 1018 Fri V M8JF (x3) DE RIS9 (x2) CW (JPL) 3642 M89 1-5 2043 Fri V DKG6 (x3) DE 3A7D (x2) //7602 CW (JPL) 7602 M89 1-5 2043 Fri V DKG6 (x3) DE 3A7D (x2) //3642 CW (JPL) 3788 M89 1-5 2045 Fri KDJY DE BEKJ R RPT 69W TO 70W K. R QSL 0454 K (Switched to voice)//7602 CW (JPL) 3777 M89 1-5 2058 Fri V M8JF (x3) DE RIS9 (x2) //3777 CW (JPL) 3777 M89 1-5 2058 Fri V M8JF (x3) DE RIS9 (x2) //4532 CW (JPL) 3777 M89 1-5 20146 Sat V DKG6 (x3) DE ALSK (x2) //9131 CW (JPL) 10947 M89 2-5 0147 Sat V DKSL (x3) DE ALSK (x2) //10947 CW (JPL) 9117 M89 2-5 0149 Sat V JKDJ (x3) DE SLBC (x2) CW (JPL) 9124 M89	5801	M89	1-5 1015	Fri	V DKG6 (x3) DE 3A7D (x2) //10180	CW	(JPL)
3642 M89 1-5 2043 Fri V DKGG (x3) DE 3A7D (x2) //7602 CW (JPL) 7602 M89 1-5 2043 Fri V DKGG (x3) DE 3A7D (x2) //3642 CW (JPL) 3788 M89 1-5 2045 Fri KDJY DE BEKI R RPT 69W TO 70W K. R QSL 0454 K (Switched to voice)//7602 CW (JPL) 4532 M89 1-5 2058 Fri V MBIF (x3) DE RIS9 (x2) //3777 CW (JPL) 3777 M89 1-5 2058 Fri V MBIF (x3) DE RIS9 (x2) //4532 CW (JPL) 3777 M89 2-5 0146 Sat V DKGG (x3) DE RIS9 (x2) //4532 CW (JPL) 10947 M89 2-5 0147 Sat V DKSL (x3) DE ALSK (x2) //9131 CW (JPL) 9131 M89 2-5 0147 Sat V JKDI (x3) DE ALSK (x2) //10947 CW (JPL) 9149 X85 0149 Sat V JKDI (x3) DE DP91 (x2) V HR NIL SK GB //6845 CW (JPL) 8858 M89	10180	M89	1-5 1015	Fri	V DKG6 (x3) DE 3A7D (x2) //5801	CW	(JPL)
7602 M89 1-5 2043 Fri V DKG6 (x3) DE 3A7D (x2) //3642 CW (JPL) 3788 M89 1-5 2045 Fri KDJY DE BEKJ R RPT 69W TO 70W K. R QSL 0454 K (Switched to voice)//7602 CW (JPL) 4532 M89 1-5 2058 Fri V M8JF (x3) DE RIS9 (x2) //4532 CW (JPL) 3777 M89 1-5 2058 Fri V M8JF (x3) DE RIS9 (x2) //4532 CW (JPL) 7602 M89 2-5 0146 Sat V DKG6 (x3) DE 3A7D (x2) CW (JPL) 10947 M89 2-5 0147 Sat V DKSL (x3) DE ALSK (x2) //1931 CW (JPL) 9131 M89 2-5 0147 Sat V DKSL (x3) DE ALSK (x2) //19947 CW (JPL) 9147 M89 2-5 0149 Sat V JKDJ (x3) DE SLBC (x2) CW (JPL) 1014 M89 2-5 0200 Sat CQ (x3) DE DP91 (x2) V HR NIL SK GB //6845 CW (JPL) 1018	8060	M89	1-5 1018	Fri	V M8JF (x3) DE RIS9 (x2)	CW	(JPL)
3788 M89 1-5 2045 Fri KDJY DE BEKJR RPT 69W TO 70W K. R QSL 0454 K (Switched to voice)//7602 CW (JPL) 4532 M89 1-5 2058 Fri V M8JF (x3) DE RIS9 (x2) //3777 CW (JPL) 3777 M89 1-5 2058 Fri V M8JF (x3) DE RIS9 (x2) //4532 CW (JPL) 7602 M89 2-5 0146 Sat V DKG6 (x3) DE 3A7D (x2) CW (JPL) 10947 M89 2-5 0147 Sat V DKSL (x3) DE ALSK (x2) //1931 CW (JPL) 5177 M89 2-5 0147 Sat V DKSL (x3) DE ALSK (x2) //1994 CW (JPL) 5177 M89 2-5 0149 Sat V JKDJ (x3) DE SLBC (x2) CW (JPL) 8858 M89 2-5 0200 Sat CQ (x3) DE DP91 (x2) V HR NIL SK GB //6845 CW (JPL) 6845 M89 2-5 0916 Sat V DKG6 (x3) DE 3A7D (x2) //10180 CW (JPL) 5801 M	3642	M89	1-5 2043	Fri	V DKG6 (x3) DE 3A7D (x2) //7602	CW	(JPL)
4532 M89 1-5 2058 Fri V M8JF (x3) DE RIS9 (x2) //3777 CW (JPL) 3777 M89 1-5 2058 Fri V M8JF (x3) DE RIS9 (x2) //4532 CW (JPL) 7602 M89 2-5 0146 Sat V DKG6 (x3) DE AJSK (x2) //9131 CW (JPL) 10947 M89 2-5 0147 Sat V DKSL (x3) DE ALSK (x2) //10947 CW (JPL) 9131 M89 2-5 0147 Sat V DKSL (x3) DE ALSK (x2) //10947 CW (JPL) 5177 M89 2-5 0149 Sat V JKDJ (x3) DE SLBC (x2) CW (JPL) 8858 M89 2-5 0200 Sat CQ (x3) DE DP91 (x2) V HR NIL SK GB //6845 CW (JPL) 6845 M89 2-5 0916 Sat V DKSL (x3) DE ALSK (x2) CW (JPL) 10947 M89 2-5 0916 Sat V DKSL (x3) DE ALSK (x2) CW (JPL) 10947 M89 2-5 09	7602	M89	1-5 2043	Fri	V DKG6 (x3) DE 3A7D (x2) //3642	CW	(JPL)
3777 M89 1-5 2058 Fri V M8JF (x3) DE RIS9 (x2) //4532 CW (JPL) 7602 M89 2-5 0146 Sat V DKG6 (x3) DE 3A7D (x2) CW (JPL) 10947 M89 2-5 0147 Sat V DKSL (x3) DE ALSK (x2) //9131 CW (JPL) 9131 M89 2-5 0147 Sat V DKSL (x3) DE ALSK (x2) //10947 CW (JPL) 5177 M89 2-5 0149 Sat V JKDJ (x3) DE SLBC (x2) CW (JPL) 8858 M89 2-5 0200 Sat CQ (x3) DE DP91 (x2) V HR NIL SK GB //6845 CW (JPL) 6845 M89 2-5 0201 Sat CQ (x3) DE DP91 (x2) V HR NIL SK GB //6845 CW (JPL) 10180 M89 2-5 0916 Sat V DKG6 (x3) DE 3A7D (x2) //5801 CW (JPL) 8851 M89 2-5 0922 Sat V DKG6 (x3) DE 3A7D (x2) //5801 CW (JPL) 8852 M89 2-5 <td>3788</td> <td>M89</td> <td>1-5 2045</td> <td>Fri</td> <td>KDJY DE BEKJ R RPT 69W TO 70W K. R QSL 0454 K (Switched to voice)//7602</td> <td>CW</td> <td>(JPL)</td>	3788	M89	1-5 2045	Fri	KDJY DE BEKJ R RPT 69W TO 70W K. R QSL 0454 K (Switched to voice)//7602	CW	(JPL)
7602 M89 2-5 0146 Sat V DKGG (x3) DE 3A7D (x2) CW (JPL) 10947 M89 2-5 0147 Sat V DKSL (x3) DE ALSK (x2) //9131 CW (JPL) 9131 M89 2-5 0147 Sat V DKSL (x3) DE ALSK (x2) //10947 CW (JPL) 5177 M89 2-5 0149 Sat V JKDJ (x3) DE SLBC (x2) CW (JPL) 8858 M89 2-5 0200 Sat CQ (x3) DE DP91 (x2) V HR NIL SK GB //6845 CW (JPL) 6845 M89 2-5 0916 Sat V DKSL (x3) DE ALSK (x2) CW (JPL) 10947 M89 2-5 0916 Sat V DKSL (x3) DE ALSK (x2) CW (JPL) 10180 M89 2-5 0916 Sat V DKGG (x3) DE ALSK (x2) CW (JPL) 5801 M89 2-5 0922 Sat V DKGG (x3) DE ALSK (x2) CW (JPL) 6845 M89 2-5 0958 Sa	4532	M89	1-5 2058	Fri	V M8JF (x3) DE RIS9 (x2) //3777	CW	(JPL)
10947 M89 2-5 0147 Sat V DKSL (x3) DE ALSK (x2) //1911 CW (JPL) 9131 M89 2-5 0147 Sat V DKSL (x3) DE ALSK (x2) //10947 CW (JPL) 5177 M89 2-5 0149 Sat V JKDJ (x3) DE SLBC (x2) CW (JPL) 8858 M89 2-5 0200 Sat CQ (x3) DE DP91 (x2) V HR NIL SK GB //6845 CW (JPL) 6845 M89 2-5 0201 Sat CQ (x3) DE DP91 (x2) V HR NIL SK GB //8858 CW (JPL) 10947 M89 2-5 0916 Sat V DKSL (x3) DE ALSK (x2) CW (JPL) 10180 M89 2-5 0916 Sat V DKG6 (x3) DE 3A7D (x2) //5801 CW (JPL) 5801 M89 2-5 0922 Sat V DKG6 (x3) DE 3A7D (x2) //10180 CW (JPL) 6845 M89 2-5 0958 Sat CQ (x3) DE DP91 (x2) V HR NIL SK GB //6845 CW (JPL) 6845 M89	3777	M89	1-5 2058	Fri	V M8JF (x3) DE RIS9 (x2) //4532	CW	(JPL)
9131 M89 2-5 0147 Sat V DKSL (x3) DE ALSK (x2) //10947 CW (JPL) 5177 M89 2-5 0149 Sat V JKDJ (x3) DE SLBC (x2) 8858 M89 2-5 0200 Sat CQ (x3) DE DP91 (x2) V HR NIL SK GB //6845 CW (JPL) 6845 M89 2-5 0201 Sat CQ (x3) DE DP91 (x2) V HR NIL SK GB //8858 CW (JPL) 10947 M89 2-5 0916 Sat V DKSL (x3) DE ALSK (x2) 10180 M89 2-5 0922 Sat V DKG6 (x3) DE 3A7D (x2) //5801 CW (JPL) 5801 M89 2-5 0922 Sat V DKG6 (x3) DE 3A7D (x2) //10180 CW (JPL) 8858 M89 2-5 0958 Sat CQ (x3) DE DP91 (x2) V HR NIL SK GB //6845 CW (JPL) 6845 M89 2-5 1000 Sat CQ (x3) DE DP91 (x2) V HR NIL SK GB //6845 CW (JPL) 6845 M89 2-5 1315 Sat V MW3D (x3) DE DP91 (x2) V HR NIL SK GB //6845 CW (JPL) 6845 M89 2-5 1318 Sat V MW3D (x3) DE SLC (x2) CW (JPL) 6840 M89 2-5 1319 Sat V DKSL (x3) DE RIS9 (x2) //4532 CW (JPL) 6840 M89 2-5 1320 Sat VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //4860 CW (JPL)	7602	M89	2-5 0146	Sat	V DKG6 (x3) DE 3A7D (x2)	CW	(JPL)
5177 M89 2-5 0149 Sat V JKDJ (x3) DE SLBC (x2) CW (JPL) 8858 M89 2-5 0200 Sat CQ (x3) DE DP91 (x2) V HR NIL SK GB //6845 CW (JPL) 6845 M89 2-5 0201 Sat CQ (x3) DE DP91 (x2) V HR NIL SK GB //8858 CW (JPL) 10947 M89 2-5 0916 Sat V DKSL (x3) DE ALSK (x2) CW (JPL) 10180 M89 2-5 0922 Sat V DKG6 (x3) DE 3A7D (x2) //5801 CW (JPL) 5801 M89 2-5 0922 Sat V DKG6 (x3) DE 3A7D (x2) //10180 CW (JPL) 8858 M89 2-5 0922 Sat V DKG6 (x3) DE ALSK (x2) //10180 CW (JPL) 8845 M89 2-5 1000 Sat CQ (x3) DE DP91 (x2) V HR NIL SK GB //6845 CW (JPL) 8858 M89 2-5 1315 Sat V MW3D (x3) DE 2SLC (x2) CW (JPL) 4532 M89 2-	10947	M89	2-5 0147	Sat	V DKSL (x3) DE ALSK (x2) //9131	CW	(JPL)
8858 M89 2-5 0200 Sat CQ (x3) DE DP91 (x2) V HR NIL SK GB //6845 CW (JPL) 6845 M89 2-5 0201 Sat CQ (x3) DE DP91 (x2) V HR NIL SK GB //8858 CW (JPL) 10947 M89 2-5 0916 Sat V DKSL (x3) DE ALSK (x2) CW (JPL) 10180 M89 2-5 0922 Sat V DKG6 (x3) DE 3A7D (x2) //5801 CW (JPL) 5801 M89 2-5 0922 Sat V DKG6 (x3) DE 3A7D (x2) //10180 CW (JPL) 8858 M89 2-5 0958 Sat CQ (x3) DE DP91 (x2) V HR NIL SK GB //6845 CW (JPL) 6845 M89 2-5 1000 Sat CQ (x3) DE DP91 (x2) V HR NIL SK GB //8858 CW (JPL) 3330 M89 2-5 1315 Sat V MW3D (x3) DE 2SLC (x2) CW (JPL) 4532 M89 2-5 1318 Sat V M8JF (x3) DE RIS9 (x2) //3777 CW (JPL) 3777 M89 2-5 1318 Sat V MSJF (x3) DE RIS9 (x2) //4532 CW (J	9131	M89	2-5 0147	Sat	V DKSL (x3) DE ALSK (x2) //10947	CW	(JPL)
6845 M89 2-5 0201 Sat CQ (x3) DE DP91 (x2) V HR NIL SK GB //8858 CW (JPL) 10947 M89 2-5 0916 Sat V DKSL (x3) DE ALSK (x2) CW (JPL) 10180 M89 2-5 0922 Sat V DKG6 (x3) DE 3A7D (x2) //5801 CW (JPL) 5801 M89 2-5 0922 Sat V DKG6 (x3) DE 3A7D (x2) //10180 CW (JPL) 8858 M89 2-5 0958 Sat CQ (x3) DE DP91 (x2) V HR NIL SK GB //6845 CW (JPL) 6845 M89 2-5 1000 Sat CQ (x3) DE DP91 (x2) V HR NIL SK GB //8858 CW (JPL) 3330 M89 2-5 1315 Sat V MW3D (x3) DE 2SLC (x2) CW (JPL) 4532 M89 2-5 1318 Sat V M8JF (x3) DE RIS9 (x2) //3777 CW (JPL) 3777 M89 2-5 1318 Sat V M8JF (x3) DE RIS9 (x2) //4532 CW (JPL) 5644 M89 2-5 1320 Sat VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //4860 CW	5177	M89	2-5 0149	Sat	V JKDJ (x3) DE SLBC (x2)	CW	(JPL)
10947 M89 2-5 0916 Sat V DKSL (x3) DE ALSK (x2) CW (JPL) 10180 M89 2-5 0922 Sat V DKG6 (x3) DE 3A7D (x2) //5801 CW (JPL) 5801 M89 2-5 0922 Sat V DKG6 (x3) DE 3A7D (x2) //10180 CW (JPL) 8858 M89 2-5 0958 Sat CQ (x3) DE DP91 (x2) V HR NIL SK GB //6845 CW (JPL) 6845 M89 2-5 1000 Sat CQ (x3) DE DP91 (x2) V HR NIL SK GB //8858 CW (JPL) 3330 M89 2-5 1315 Sat V MW3D (x3) DE 2SLC (x2) CW (JPL) 4532 M89 2-5 1318 Sat V M8JF (x3) DE RIS9 (x2) //3777 CW (JPL) 3777 M89 2-5 1318 Sat V DKSL (x3) DE RIS9 (x2) //4532 CW (JPL) 5644 M89 2-5 1319 Sat V DKSL (x3) DE NYZ (x2) (R5) QSA ? K //4860 CW (JPL) 4860 M89	8858	M89	2-5 0200	Sat	CQ (x3) DE DP91 (x2) V HR NIL SK GB //6845	CW	(JPL)
10180 M89 2-5 0922 Sat V DKG6 (x3) DE 3A7D (x2) //5801 CW (JPL) 5801 M89 2-5 0922 Sat V DKG6 (x3) DE 3A7D (x2) //10180 CW (JPL) 8858 M89 2-5 0958 Sat CQ (x3) DE DP91 (x2) V HR NIL SK GB //6845 CW (JPL) 6845 M89 2-5 1000 Sat CQ (x3) DE DP91 (x2) V HR NIL SK GB //8858 CW (JPL) 3330 M89 2-5 1315 Sat V MW3D (x3) DE 2SLC (x2) CW (JPL) 4532 M89 2-5 1318 Sat V M8JF (x3) DE RIS9 (x2) //3777 CW (JPL) 3777 M89 2-5 1318 Sat V M8JF (x3) DE RIS9 (x2) //4532 CW (JPL) 5644 M89 2-5 1319 Sat V DKSL (x3) DE ALSK (x2) CW (JPL) 6840 M89 2-5 1320 Sat VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //4860 CW (JPL) 4860 M89	6845	M89	2-5 0201	Sat	CQ (x3) DE DP91 (x2) V HR NIL SK GB //8858	CW	(JPL)
5801 M89 2-5 0922 Sat V DKG6 (x3) DE 3A7D (x2) //10180 CW (JPL) 8858 M89 2-5 0958 Sat CQ (x3) DE DP91 (x2) V HR NIL SK GB //6845 CW (JPL) 6845 M89 2-5 1000 Sat CQ (x3) DE DP91 (x2) V HR NIL SK GB //8858 CW (JPL) 3330 M89 2-5 1315 Sat V MW3D (x3) DE 2SLC (x2) CW (JPL) 4532 M89 2-5 1318 Sat V M8JF (x3) DE RIS9 (x2) //3777 CW (JPL) 3777 M89 2-5 1318 Sat V M8JF (x3) DE RIS9 (x2) //4532 CW (JPL) 5644 M89 2-5 1319 Sat V DKSL (x3) DE ALSK (x2) CW (JPL) 6840 M89 2-5 1320 Sat VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //4860 CW (JPL) 4860 M89 2-5 1320 Sat VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //6840 CW (JPL)	10947	M89	2-5 0916	Sat	V DKSL (x3) DE ALSK (x2)	CW	(JPL)
8858 M89 2-5 0958 Sat CQ (x3) DE DP91 (x2) V HR NIL SK GB //6845 CW (JPL) 6845 M89 2-5 1000 Sat CQ (x3) DE DP91 (x2) V HR NIL SK GB //8858 CW (JPL) 3330 M89 2-5 1315 Sat V MW3D (x3) DE 2SLC (x2) CW (JPL) 4532 M89 2-5 1318 Sat V M8JF (x3) DE RIS9 (x2) //3777 CW (JPL) 3777 M89 2-5 1318 Sat V M8JF (x3) DE RIS9 (x2) //4532 CW (JPL) 5644 M89 2-5 1319 Sat V DKSL (x3) DE ALSK (x2) CW (JPL) 6840 M89 2-5 1320 Sat VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //4860 CW (JPL) 4860 M89 2-5 1320 Sat VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //6840 CW (JPL)	10180	M89	2-5 0922	Sat	V DKG6 (x3) DE 3A7D (x2) //5801	CW	(JPL)
6845 M89 2-5 1000 Sat CQ (x3) DE DP91 (x2) V HR NIL SK GB //8858 CW (JPL) 3330 M89 2-5 1315 Sat V MW3D (x3) DE 2SLC (x2) CW (JPL) 4532 M89 2-5 1318 Sat V M8JF (x3) DE RIS9 (x2) //3777 CW (JPL) 3777 M89 2-5 1318 Sat V M8JF (x3) DE RIS9 (x2) //4532 CW (JPL) 5644 M89 2-5 1319 Sat V DKSL (x3) DE ALSK (x2) CW (JPL) 6840 M89 2-5 1320 Sat VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //4860 CW (JPL) 4860 M89 2-5 1320 Sat VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //6840 CW (JPL)	5801	M89	2-5 0922	Sat	V DKG6 (x3) DE 3A7D (x2) //10180	CW	(JPL)
3330 M89 2-5 1315 Sat V MW3D (x3) DE 2SLC (x2) CW (JPL) 4532 M89 2-5 1318 Sat V M8JF (x3) DE RIS9 (x2) //3777 CW (JPL) 3777 M89 2-5 1318 Sat V M8JF (x3) DE RIS9 (x2) //4532 CW (JPL) 5644 M89 2-5 1319 Sat V DKSL (x3) DE ALSK (x2) CW (JPL) 6840 M89 2-5 1320 Sat VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //4860 CW (JPL) 4860 M89 2-5 1320 Sat VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //6840 CW (JPL)				Sat			
4532 M89 2-5 1318 Sat V M8JF (x3) DE RIS9 (x2) //3777 CW (JPL) 3777 M89 2-5 1318 Sat V M8JF (x3) DE RIS9 (x2) //4532 CW (JPL) 5644 M89 2-5 1319 Sat V DKSL (x3) DE ALSK (x2) CW (JPL) 6840 M89 2-5 1320 Sat VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //4860 CW (JPL) 4860 M89 2-5 1320 Sat VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //6840 CW (JPL)				Sat			
3777 M89 2-5 1318 Sat V M8JF (x3) DE RIS9 (x2) //4532 CW (JPL) 5644 M89 2-5 1319 Sat V DKSL (x3) DE ALSK (x2) CW (JPL) 6840 M89 2-5 1320 Sat VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //4860 CW (JPL) 4860 M89 2-5 1320 Sat VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //6840 CW (JPL)				Sat			
5644 M89 2-5 1319 Sat V DKSL (x3) DE ALSK (x2) CW (JPL) 6840 M89 2-5 1320 Sat VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //4860 CW (JPL) 4860 M89 2-5 1320 Sat VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //6840 CW (JPL)		M89		Sat			
6840 M89 2-5 1320 Sat VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //4860 CW (JPL) 4860 M89 2-5 1320 Sat VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //6840 CW (JPL)		M89		Sat		CW	
4860 M89 2-5 1320 Sat VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //6840 CW (JPL)	5644	M89		Sat		CW	
				Sat			
3642 M89 2-5 1532 Sat V DKG6 (x3) DE 3A7D (x2) CW (JPL)							
	3642	M89	2-5 1532	Sat	V DKG6 (x3) DE 3A7D (x2)	CW	(JPL)

Eroa	Code	Date	LITC	Day	Romarks	Mode	Ctrb
Freq. 3777	M89		1533	Day Sat	Remarks V M8JF (x3) DE RIS9 (x2)	CW	(JPL)
						CW	
6840 7602	M89		1720 1722	Sat	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K	CW	(JPL) (JPL)
3642	M89 M89		1722	Sat Sat	V DKG6 (x3) DE 3A7D (x2) //3642 V DKG6 (x3) DE 3A7D (x2) //7602	CW	(JPL)
4131	M89		1727			CW	(JPL)
5765	M89		1735	Sat Sat	V JKDJ (x3) DE SLBC (x2)	CW	(JPL)
	_				V TY9D (x3) DE EPX2 (x2) V	CW	
5644 5765	M89		2225 2226	Sat	V DKSL (x3) DE ALSK (x2)	CW	(JPL)
4857	M89 M89		2226	Sat	V TY9D (x3) DE EPX2 (x2) V //4857	CW	(JPL) (JPL)
8060	M89		2230	Sat Sat	V TY9D (x3) DE EPX2 (x2) V //5765	CW	(JPL)
9131	M89		1100	Sun	V M8JF (x3) DE RIS9 (x2) V DKSL (x3) DE ALSK (x2)	CW	(JPL)
5801	M89		1104	Sun	V DKG6 (x3) DE 3A7D (x2) //10180	CW	(JPL)
10180	M89		1104	Sun	V DKG6 (x3) DE 3A7D (x2) //5801	CW	(JPL)
14560	M89		1111	Sun	i.p. N475 U7TU 3565 U7TU NDU6 U77A TND5 (see N&O 212)	CW	(JPL)
3642	M89		1506	Sun	V DKG6 (x3) DE 3A7D (x2)	CW	(JPL)
3777	M89		1507	Sun	V M8JF (x3) DE RIS9 (x2)	CW	(JPL)
3642	M89		2043	Sun	V DKG6 (x3) DE 3A7D (x2) //7602	CW	(JPL)
7602	M89		2203	Sun	V DKG6 DKG6 DKG6 DE 3A7D 3A7D	CW	(Nige)
10180	M89		0216	Mon	V DKG6 (x3) DE 3A7D (x2) //5801	CW	(JPL)
5801	M89		0216		V DKG6 (x3) DE 3A7D (x2) //10180	CW	(JPL)
9131	M89		0210		V DKSL (x3) DE ALSK (x2)	CW	(JPL)
5588	M89		1028		V MW3D (x3) DE 2SLC (x2)	CW	(JPL)
9131	M89		1028		V DKSL (x3) DE ALSK (x2) //6421	CW	(JPL)
6421	M89		1031		V DKSL (x3) DE ALSK (x2)//9421 V DKSL (x3) DE ALSK (x2)//9131	CW	(JPL)
6793	M89		1031		V M8JF (x3) DE RIS9 (x2) //8060	CW	(JPL)
8060	M89		1033	Mon	V M8JF (x3) DE RIS9 (x2) //6793	CW	(JPL)
3777	M89		1237	Mon	V M8JF (x3) DE RIS9 (x2) //4532	CW	(JPL)
4532	M89		1237	Mon	V M8JF (x3) DE RIS9 (x2) //3777	CW	(JPL)
5644	M89		1239	Mon	V DKSL (x3) DE ALSK (x2)	CW	(JPL)
5177	M89		1241	Mon	V JKDJ (x3) DE SLBC (x2)	CW	(JPL)
7602	M89		2043	Mon	V DKG6 (x3) DE 3A7D (x2) //3642	CW	(JPL)
4131	M89		2056	Mon	V JKDJ (x3) DE SLBC (x2)	CW	(JPL)
3642	M89		1616	Tue	V DKG6 (x3) DE 3A7D (x2)	CW	(JPL)
3777	M89		1620	Tue	V M8JF (x3) DE RIS9 (x2)	CW	(JPL)
6845	M89		1002	Thu	CQ (x3) DE DP91 (x2) V	CW	(JPL)
5801	M89		1013	Thu	V DKG6 (x3) DE 3A7D (x2) //10180	CW	(JPL)
10180	M89		1013	Thu	V DKG6 (x3) DE 3A7D (x2) //5801	CW	(JPL)
9131	M89		1015	Thu	V DKSL (x3) DE ALSK (x2)	CW	(JPL)
8858	M89	8-5	0956	Fri	CQ (x3) DE DP91 (x2) V HR NIL SK GB //6845	CW	(JPL)
6845	M89	8-5	1002	Fri	CQ (x3) DE DP91 (x2) V HR NIL SK GB //8858	CW	(JPL)
3330	M89	8-5	1535	Fri	V MW3D (x3) DE 2SLC (x2)	CW	(JPL)
7602	M89		1537	Fri	V DKG6 (x3) DE 3A7D (x2) //3642	CW	(JPL)
3642	M89	8-5	1537	Fri	V DKG6 (x3) DE 3A7D (x2) //7602	CW	(JPL)
3777	M89		1538	Fri	V M8JF (x3) DE RIS9 (x2) //4532	CW	(JPL)
4532	M89	8-5	1538	Fri	V M8JF (x3) DE RIS9 (x2) //3777	CW	(JPL)
4131	M89	8-5	1540	Fri	V JKDJ (x3) DE SLBC (x2)	CW	(JPL)
3821	M89	8-5	1541	Fri	V DKSL (x3) DE ALSK (x2) //5644	CW	(JPL)
5644	M89	8-5	1541	Fri	V DKSL (x3) DE ALSK (x2) //3281	CW	(JPL)
3521	M89	8-5	2041	Fri	i.p. RMKS CQ = MSG NR MSG NR 1574 CK 61 051609 0430 =	CW	(JPL)
5801	M89	10-5	1119	Sun	V DKG6 (x3) DE 3A7D (x2) //10180	CW	(JPL)
10180	M89	10-5	1119	Sun	V DKG6 (x3) DE 3A7D (x2) //5801	CW	(JPL)
6840	M89	10-5	1120	Sun	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //10640	CW	(JPL)
10640	M89	10-5	1120	Sun	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //6840	CW	(JPL)
4532	M89	10-5	1447	Sun	V M8JF (x3) DE RIS9 (x2) //3777	CW	(JPL)
3777	M89	10-5	1447	Sun	V M8JF (x3) DE RIS9 (x2) //4532	CW	(JPL)
10180	M89	10-5	1448	Sun	V DKG6 (x3) DE 3A7D (x2) //5801	CW	(JPL)
5801	M89	10-5		Sun	V DKG6 (x3) DE 3A7D (x2) //10180	CW	(JPL)
3821	M89	10-5		Sun	V DKSL (x3) DE ALSK (x2) //5644	CW	(JPL)
5644	M89	10-5		Sun	V DKSL (x3) DE ALSK (x2) //3821	CW	(JPL)
5177	M89	10-5		Sun	V JKDJ (x3) DE SLBC (x2)	CW	(JPL)
7602	M89	10-5		Sun	i.p. 5132 RMKS 512 TO 6790 6240 5180 5160 =	CW	(JPL)
4131	M89	10-5		Sun	V JKDJ (x3) DE SLBC (x2)	CW	(JPL)

Freq.	Code	Date UTC	Day	Remarks	Mode	Ctrb
4269	M89	10-5 2002	Sun	i.p. MSG GA NR 263 CK 111 57 0511 0330 RMKS 2410 TO 2090 K	CW	(JPL)
5180	M89	10-5 2002	Sun	i.p. 7T65 3466 5AU3 37TA 6T3D DT6N UN6D	CW	(JPL)
8840	M89	12-5 0956	Tue	(i.p. 6AU4 A4UD TND7 34TD 436A AR QSL? K. R RUSEEEEE UGA U GA	CW	(JPL)
8858	M89	12-5 0550	Tue	CQ (x3) DE DP91 (x2) V HR NIL SK GB	CW	(JPL)
10180	M89	12-5 1005	Tue	V DKG6 (x3) DE 3A7D (x2) //5801	CW	(JPL)
5801	M89	12-5 1010	Tue	V DKG6 (x3) DE 3A7D (x2)//3801 V DKG6 (x3) DE 3A7D (x2) //10180	CW	(JPL)
9167	M89	12-5 1010	Tue	i.p. 7U4A D35T U7T4 UD7A U3TN 6A7D AR AR K/UGA	CW	(JPL)
10640	M89	12-5 1017	Tue	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA? K	CW	(JPL)
3330	M89	15-5 1452	Fri	V MW3D (x3) DE 2SLC (x2) I	CW	(JPL)
3642	M89	15-5 1609	Fri	V DKG6 (x3) DE 3A7D (x2) //7602	CW	(JPL)
7602	M89	15-5 1609	Fri	V DKG6 (x3) DE 3A7D (x2)//7602 V DKG6 (x3) DE 3A7D (x2) //3642	CW	(JPL)
3786	M89	15-5 1610	Fri	i.p. 0009 BT F6J/M1D AR NR 1350/EX 0009 BT F6J/M1D AR QSY 04	CW	(JPL)
3777	M89	15-5 1614	Fri	V M8JF (x3) DE RIS9 (x2) //4532	CW	(JPL)
4532	M89	15-5 1614	Fri	V M8JF (x3) DE RIS9 (x2) //3777	CW	(JPL)
4522	M89	15-5 1615	Fri	i.p. RPT 49W K. R RPT 49W 7456 7456 K	CW	(JPL)
4131	M89	15-5 1618	Fri	V JKDJ (x3) DE SLBC (x2)	CW	(JPL)
3821	M89	15-5 1651	Fri	V DKSL (x3) DE ALSK (x2) //5644	CW	(JPL)
5644	M89	15-5 1651	Fri	V DKSL (x3) DE ALSK (x2)//3821	CW	(JPL)
4673	M89	15-5 1656	Fri	i.p. AR K. R RPT 03W BT TAND TAND AR K	CW	(JPL)
5378	M89	15-5 1704	Fri	i.p. R R .IEC = DKFL DKFL K AR	CW	(JPL)
5635	M89	15-5 1704	Fri	i.p. 6NDT 475N AU34 AR K (see N&O 212)	CW	(JPL)
5685	M89	15-5 1718	Fri	i.p. AR K. R RPT 23W = 5463 5463 K GA	CW	(JPL)
6414	M89	15-5 1718	Fri	i.p. AR K. R RPT OK U GA K	CW	(JPL)
4866	M89	15-5 1728	Fri	i.p. /EX 0421 = E0K/M5O AR QSY	CW	(JPL)
10180	M89	17-5 1249	Sun	V DKG6 (x3) DE 3A7D (x2) //5801	CW	(JPL)
5801	M89	17-5 1249	Sun	V DKG6 (x3) DE 3A7D (x2)//3801 V DKG6 (x3) DE 3A7D (x2) //10180	CW	(JPL)
8000	M89	17-5 1243	Sun	i.p. R QSA 2 QSA ? K. R GA K. (see N&O 212)	CW	(JPL)
8023	M89	17-5 1232	Sun	i.p. U3N7 4UT5 A34D 6UN7 567D D74A 56NT	CW	(JPL)
3642	M89	17-5 1502	Sun	V DKG6 (x3) DE 3A7D (x2) //7602	CW	(JPL)
7602	M89	17-5 1616	Sun	V DKG6 (x3) DE 3A7D (x2) //7602 V DKG6 (x3) DE 3A7D (x2) //3642	CW	(JPL)
3330	M89	17-5 1618	Sun	V MW3D (x3) DE 2SLC (x2)	CW	(JPL)
4131	M89	17-5 1619	Sun	V JKDJ (x3) DE SLBC (x2)	CW	(JPL)
3777	M89	17-5 1619	Sun	V M8JF (x3) DE RIS9 (x2) //4532	CW	(JPL)
4860	M89	17-5 1620	Sun	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //6840	CW	(JPL)
6840	M89	17-5 1620	Sun	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) Q5A : K//4860	CW	(JPL)
4532	M89	17-5 1620	Sun	V M8JF (x3) DE RIS9 (x2) //3777	CW	(JPL)
5644	M89	17-5 1623	Sun	V DKSL (x3) DE ALSK (x2) //3821	CW	(JPL)
3821	M89	17-5 1623	Sun	V DKSL (x3) DE ALSK (x2) //5644	CW	(JPL)
5500	M89	17-5 2007	Sun	i.p. 7G 05/CCK CK 25 37 0518 0505 RMKS (see N&O 212)	CW	(JPL)
5588	M89	18-5 1045	Mon		CW	(JPL)
9131	M89	18-5 1047		V DKSL (x3) DE ALSK (x2) //10947	CW	(JPL)
10947	M89	18-5 1047	Mon	V DKSL (x3) DE ALSK (x2)//9131	CW	(JPL)
10180	M89	18-5 1049		V DKG6 (x3) DE 3A7D (x2)	CW	(JPL)
3330	M89	18-5 1419		V MW3D (x3) DE 2SLC (x2)	CW	(JPL)
4860	M89	18-5 1420		VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //6840	CW	(JPL)
6840	M89	18-5 1420		VVV (x3) Q2M (x3) DE NYZ (x2) (R5) Q5A : K//4860	CW	(JPL)
4532	M89	18-5 1425		i.p. /18/2255/461/44/69 AR (see N&O 212) //3777	CW	(JPL)
3642	M89	18-5 1425		V DKG6 (x3) DE 3A7D (x2) //7602	CW	(JPL)
3777	M89	18-5 1425		V M8JF (x3) DE RIS9 (x2) //4532	CW	(JPL)
7602	M89	18-5 1425		V DKG6 (x3) DE 3A7D (x2) //3642	CW	(JPL)
5644	M89	18-5 1425		V DKSL (x3) DE ALSK (x2) //3821	CW	(JPL)
3821	M89	18-5 1434		V DKSL (x3) DE ALSK (x2) //5644	CW	(JPL)
5500	M89	18-5 1435	Mon		CW	(JPL)
7788	M89	18-5 1437		i.p. 7G NR 153/CCK CK 199 03 0518 2000 R59 CQ	CW	(JPL)
7777	M89	18-5 1446	Mon	i.p. 64D4 653D AT4D A46D TU6A T7N3 NT57 N5U6	CW	(JPL)
8060	M89	18-5 1620	Mon	V M8JF (x3) DE RIS9 (x2) //6793	CW	(JPL)
6793	M89	18-5 1620	Mon	V M8JF (x3) DE RIS9 (x2) //8060	CW	(JPL)
5396	M89	18-5 1020	Mon	i.p. AUT3 U4AD 4A5N 3UAT	CW	(JPL)
5417	M89	18-5 1711	Mon	i.p. AR K. R RPT 01W BT A56U AR K (see N&O 212)	CW	(JPL)
5452	M89	18-5 1717	Mon	i.p. NR 1100 CK 61 42 0519 0100 RMKS (see N&O 212)	CW	(JPL)
4131	M89	18-5 1720	Mon		CW	(JPL)
9131		19-5 0205		V DKSL (x3) DE ALSK (x2) //10947		(JPL)
2121	M89	19-0 0205	Tue	V DNJL (X3) DE ALJN (X2) // 1094/	CW	(JLL)

Free, Lode Code Date UTC Day Remarks CV (IP) 888 M99 195<0005 Toe CUSCL(3) DF AUST (2)/9131 CV (IP) 888 M99 195<0015 Toe CUSCL(3) DF ADRI (2)/10100 CW (IP) 10180 M99 195<0211 Toe VDKGG (3) DE ADAT (20)///1010 CW (IP) 5840 M99 195<0221 Toe VDKGG (3) DE ADAT (20)///1010 CW (IP) 5840 M99 195-0222 Toe VDKCG (3) DE ADAT (20)///1010 CW (IP) 3120 M99 195-0222 Toe VDK (20) CM (21) DE ADAT (20)///1015 (20) A F K //10640 CW (IP) 3177 M89 195-1357 Toe VDKSE (30) DE ADS (22) CW (IP) 10947 M99 275-2020 We VDKSE (30) DE ADS (22) CW (IP) 10947 M99 295-1218 Fri VDKSE (30) DE ADS (22) CW (IP) 10947 M99 <t< th=""><th>_</th><th>l</th><th></th><th></th><th></th><th></th><th></th><th></th></t<>	_	l						
BASS MSS 13-5 COLD TUNE COLY DID TOWN	Freq.	Code			Day	Remarks	Mode	Ctrb
Sect								· , ,
1918 1919 1915 1911 1914 1915								· · · /
7331 M89 19-5 0218 Tue Lip. SOMA THAS 7-43H UDT3 43T7 AR GLS (Y. AGMR RI RIWK NR CI/57 K CW (IPL) 1640 M89 19-5 0220 Tue VVV (k3) QZM (k3) DE NYZ (k2) (R5) GSA 7 K //R840 CW (IPL) 8110 M89 19-5 0227 Tue VVV (k3) QZM (k3) DE NYZ (k2) (R5) GSA 7 K //R840 CW (IPL) 8110 M89 19-5 1357 Tue V MED (k3) DE NSE (k2) CW (IPL) 3821 M89 19-5 1357 Tu V MED (k3) DE ALSK (k2) CW (IPL) 1014 M89 27-5 0200 Wed V DKG (k3) DE ALSK (k2) CW (IPL) 1018 M89 27-5 1219 Fri V MMS (k3) DE ALSK (k2) CW (IPL) 4532 M89 29-5 1219 Fri V MMS (k3) DE NSP (k2) //3752 CW (IPL) 477 M89 29-5 1220 Fri V MMS (k3) DE NSP (k2) //4522 CW (IPL) 4832 <t< td=""><td></td><td></td><td></td><td></td><td></td><td>, , , , , , , , , , , , , , , , , , ,</td><td></td><td>· ,</td></t<>						, , , , , , , , , , , , , , , , , , ,		· ,
1949 1949								
1969 195 19						•		
		M89			Tue			
377 888 195 1355 Tue V.NKSIF (x3] DE RISS (x2)		M89			Tue	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //6840		
1921 1937 1938 195 1375 1948 195 1375 1948 195 1375 1948 195 1375 1948 195 1375 1948 195 1375 1948 195 1375 1948 195 1375 1948 1948 1375 1					Tue			
1991 1995 1995 1995 1996 1995		M89			Tue	V M8JF (x3) DE RIS9 (x2)	CW	
10150 M89		M89			Tue	. ,	CW	
3330 M89 295 1218 Fri VMM3D (xi) DE RISS (x2) //3777 CW (PL) 4332 M89 295 1219 Fri VMBIF (x3) DE RISS (x2) //3732 CW (PPL) 640 M89 295 1219 Fri VMV (x3) Q2M (x3) DE NYZ (x2) (x5) GSA ? K //10640 CW (PPL) 10640 M89 295 1220 Fri VVW (x3) Q2M (x3) DE NYZ (x2) (x5) GSA ? K //10640 CW (PPL) 1010 M89 295 1228 Fri VDKSL (x3) DE ANSK (x2) //10947 CW (PPL) 9131 M89 295 1228 Fri VDKSL (x3) DE ANSK (x2) //10947 CW (PPL) 3300 M89 295 1515 Fri VDKGE (x3) DE ANSK (x2) //10947 CW (PPL) 3404 M89 295 1515 Fri VDKGE (x3) DE ANSK (x2) //10947 CW (PPL) 5644 M89 295 1515 Fri VDKGE (x3) DE ANSK (x2) //10947 CW (PPL) 5666 M89<					Wed	V DKSL (x3) DE ALSK (x2)		
4532 M89 29-5 1219 Fri VMSIF (x3) DE RIS9 (x2) //3777 CW (PPL) 3777 M89 29-5 1220 Fri VVK (32) QEM (x3) DE NYZ (x2) (R5) DSA ? K //10640 CW (PPL) 10640 M89 29-5 1220 Fri VVK (x2) QEM (x3) DE NYZ (x2) (R5) DSA ? K //6840 CW (PPL) 10180 M89 29-5 1226 Fri VDKSL (x3) DE AJSX (x2) //10947 CW (PPL) 19947 M89 29-5 1228 Fri VDKSL (x3) DE AJSX (x2) //19131 CW (PPL) 19047 M89 29-5 1515 Fri VDKSE (x3) DE AJSX (x2) //19131 CW (PPL) 3642 M89 29-5 1515 Fri VDKGE (x3) DE AJSX (x2) //1912 CW (PPL) 3642 M89 29-5 1515 Fri VDKGE (x3) DE AJSX (x2) //1912 CW (PPL) 3644 M89 29-5 1515 Fri VDKGE (x3) DE AJSX (x2) //1902 CW (PPL) 4640	10180	M89	27-5 0	210	Wed		CW	
3777 M89 29-5 1219 Fri VMBIF (λ2) DE RIS9 (λ2) /4532 CW (PIL) 6840 M89 29-5 1220 Fri VV (χ3) Q2M (χ3) DE NYZ (λ2) (R5) GSA ? K //6840 CW (PPL) 10160 M89 29-5 1226 Fri VV (X6) Q2M (χ3) DE NYZ (λ2) (R5) GSA ? K //6840 CW (PPL) 10180 M89 29-5 1228 Fri VDKGE (x3) DE AJXF (x2) //1931 CW (PPL) 3330 M89 29-5 1228 Fri VDKGE (x3) DE AJXF (x2) //1931 CW (PPL) 3340 M89 29-5 1513 Fri VDKGE (x3) DE AJXF (x2) //1931 CW (PPL) 3642 M89 29-5 1515 Fri VDKGE (x3) DE AJXF (x2) //17602 CW (PPL) 5644 M89 29-5 1515 Fri VDKGE (x3) DE AJXF (x2) CW (PPL) 6840 M89 29-5 1520 Fri VDV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //4860 CW (PPL) 6840	3330	M89	29-5 1	.218	Fri	V MW3D (x3) DE 2SLC (x2)	CW	(JPL)
6840 M89 29-5 1220 Fri VVV (x3) QZM (x3) DE NYZ (x2) (R5) QSA ? K //106840 CW (JPL) 1060 M89 29-5 1226 Fri VVV (x3) QZM (x3) DE NYZ (x2) (R5) QSA ? K //106840 CW (JPL) 10180 M89 29-5 1228 Fri V OKSL (x3) DE ALSK (x2) //10947 CW (JPL) 10947 M89 29-5 15128 Fri V OKSL (x3) DE ALSK (x2) //19331 CW (JPL) 7602 M89 29-5 1515 Fri V DKGG (x3) DE ALSK (x2) //1962 CW (JPL) 8644 M89 29-5 1515 Fri V DKGG (x3) DE ALSK (x2) CW (JPL) 6666 M89 29-5 1518 Fri V DKGG (x3) DE ALSK (x2) CW (JPL) 6860 M89 29-5 1518 Fri V DKGG (x3) DE ALSK (x2) CW (JPL) 6860 M89 29-5 1519 Fri V VV (x3) QZM (x3) DE NYZ (x2) (R5) QSA? K //48600 CW (JPL) 8153.7 </td <td>4532</td> <td>M89</td> <td>29-5 1</td> <td>219</td> <td>Fri</td> <td>V M8JF (x3) DE RIS9 (x2) //3777</td> <td>CW</td> <td>(JPL)</td>	4532	M89	29-5 1	219	Fri	V M8JF (x3) DE RIS9 (x2) //3777	CW	(JPL)
10640 M89 29-5 1220 Fri VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //6840 CW (JPL) 10180 M89 29-5 1226 Fri V DKG6 (x3) DE 3A7D (x2) CW (JPL) 10947 M89 29-5 1228 Fri V DKG6 (x3) DE 3A7D (x2) CW (JPL) 10947 M89 29-5 1228 Fri V DKG6 (x3) DE ASK (x2) //10947 CW (JPL) 10948 M89 29-5 1513 Fri V MW3D (x3) DE ZSLC (x2) CW (JPL) 10949 M89 29-5 1513 Fri V DKG6 (x3) DE ASK (x2) //1062 CW (JPL) 10940 M89 29-5 1515 Fri V DKG6 (x3) DE 3A7D (x2) //7602 CW (JPL) 10940 M89 29-5 1515 Fri V DKG6 (x3) DE ASA7D (x2) //7602 CW (JPL) 10940 M89 29-5 1517 Fri V DKSL (x3) DE AKS (x2) CW (JPL) 10940 M89 29-5 1517 Fri V DKSL (x3) DE ASAF (x2) //7602 CW (JPL) 10940 M89 29-5 1520 Fri V VV (x3) QZM (x3) DE NYZ (x2) (R5) QSA ? K //4860 CW (JPL) 10940 M89 29-5 1520 Fri VVV (x3) QZM (x3) DE NYZ (x2) (R5) QSA ? K //4860 CW (JPL) 10940 M89 29-5 1520 Fri VVV (x3) QZM (x3) DE NYZ (x2) (R5) QSA ? K //4860 CW (JPL) 10940 M89 29-5 1520 Fri VVV (x3) QZM (x3) DE NYZ (x2) (R5) QSA ? K //4860 CW (JPL) 10940 M89 29-5 1520 Fri VVV (x3) QZM (x3) DE NYZ (x2) (R5) QSA ? K //4860 CW (JPL) 10940 M89 29-5 1520 Fri VVV (x3) QZM (x3) DE NYZ (x2) (R5) QSA ? K //4860 CW (JPL) 10940 M89 29-5 1520 Fri VVV (x3) QZM (x3) DE NYZ (x2) (R5) QSA ? K //4860 CW (JPL) 10940 M89 29-5 1520 Fri VVV (x3) QZM (x3) DE NYZ (x2) (R5) QSA ? K //4860 CW (JPL) 10940 M89 29-5 1520 Fri VVV (x3) QZM (x3) DE NYZ (x2) (R5) QSA ? K //4860 CW (JPL) 10940 M89 29-5 1520 Fri VVV (x3) QZM (x3) DE NYZ (x2) (R5) QSA ? K //4860 CW (JPL) 10940 M89 29-5 1520 Fri VVV (x3) QZM (x3) DE NYZ (x2) (R5) QSA ? K //4860 CW (JPL) 10940 M89 29-5 1520 Fri VVV (x3) QZM (x3) DE NYZ (x2) (R5) QSA ? K //4860 CW (JPL) 10940 M89 29-5 1520 Fri VVV (x3) QZM (x3) DE	3777	M89	29-5 1	219	Fri	V M8JF (x3) DE RIS9 (x2) //4532	CW	(JPL)
10180 M89	6840	M89	29-5 1	.220	Fri	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //10640	CW	(JPL)
9131 M89 29-5 1228 Fri V DKSL (x3) DE ALSK (x2) //10947 CW (JPL) 10947 M89 29-5 1228 Fri V DKSL (x3) DE ALSK (x2) //9131 CW (JPL) 3330 M89 29-5 1515 Fri V DKGS (x3) DE ALSK (x2) //3642 CW (JPL) 3642 M89 29-5 1515 Fri V DKGS (x3) DE ALSK (x2) //3642 CW (JPL) 6666 M89 29-5 1515 Fri V DKGS (x3) DE ALSK (x2) CW (JPL) 6860 M89 29-5 1518 Fri VJKG (X3) DE ALSK (x2) CW (JPL) 6860 M89 29-5 1520 Fri VVV (x3) QEM (x3) DE NYZ (x2) (RS) QSA ? K //4860 CW (JPL) 8600 M89 29-5 1520 Fri VVV (x3) QEM (x3) DE NYZ (x2) (RS) QSA ? K //6840 CW (JPL) 8600 M89 30-5 122 Sri MYX (x3) DE NYZ (x2) (RS) QSA ? K //6840 CW (AB1) 5153.7 <t< td=""><td>10640</td><td>M89</td><td>29-5 1</td><td>.220</td><td>Fri</td><td>VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //6840</td><td>CW</td><td>(JPL)</td></t<>	10640	M89	29-5 1	.220	Fri	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //6840	CW	(JPL)
10947 M89	10180	M89	29-5 1	.226	Fri	V DKG6 (x3) DE 3A7D (x2)	CW	(JPL)
330 M89	9131	M89	29-5 1	.228	Fri	V DKSL (x3) DE ALSK (x2) //10947	CW	(JPL)
7602 M89 29-5 1515 Fri V DKG6 (x3) DE 3A7D (x2) //7602 CW (JPL) 3642 M89 29-5 1515 Fri V DKG6 (x3) DE 3A7D (x2) //7602 CW (JPL) 6664 M89 29-5 1518 Fri V DKSL (x3) DE ALSK (x2) CW (JPL) 6660 M89 29-5 1528 Fri LVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA 7 K //4860 CW (JPL) 4860 M89 29-5 1520 Fri VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA 7 K //4860 CW (JPL) 4860 M89 29-5 1520 Fri VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA 7 K //4860 CW (JPL) 4860 M89 29-5 1520 Fri VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA 7 K //4860 CW (JPL) 4860 M89 29-5 1520 Fri VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA 7 K //4860 CW (JPL) 4860 M89 30-5 1128 NB M89 M89 30-5 1128	10947	M89	29-5 1	.228	Fri	V DKSL (x3) DE ALSK (x2) //9131	CW	(JPL)
3642 M89 29-5 1515 Fri V DKGG (x3) DE AJSTD (x2) //7602 CW (IPL) 5644 M89 29-5 1517 Fri VDKSL (x3) DE ALSK (x2) CW (IPL) 6866 M89 29-5 1518 Fri Ip. III = U473 NDSD AT54 DAU7 6NT3 STAT U364 (Cont'd) AR CW (IPL) 6840 M89 29-5 1520 Fri VVV (x3) QZM (x3) DE NYZ (x2) (R5) QSA 7 K //6840 CW (IPL) 8600 M89 29-5 1520 Fri VVV (x3) QZM (x3) DE NYZ (x2) (R5) QSA 7 K //6840 CW (IPL) 8060 M89 29-5 1520 Fri VVV (x3) QZM (x3) DE NYZ (x2) (R5) QSA 7 K //6840 CW (MRB) 5153.7 MX 4-5 1912 Mon Beacon "D" Sevastopol/Odessa CW (MPJ) 5153.9 MX 4-5 1912 Mon Beacon "D" Odessa/Sevastopol CW (AB 4947 MX 1-5 1808 Mon Beacon "C" Moscow CW (AB 7038.9	3330	M89	29-5 1	.513	Fri	V MW3D (x3) DE 2SLC (x2)	CW	(JPL)
6644 M89 29-5 1517 Fri VDKSL (x3) DE ALSK (x2) CW (JPL) 6666 M89 29-5 1518 Fri ip. III = U473 ND5D AT54 DAUT 6NT3 57AT U364 (Cont'd) AR CW (JPL) 4860 M89 29-5 1520 Fri VVV (x3) QZM (x3) DE NYZ (x2) (R5) QSA ? K //4860 CW (JPL) 4860 M89 29-5 1520 Fri VVV (x3) QZM (x3) DE NYZ (x2) (R5) QSA ? K //4860 CW (At8) 5153.7 MX 4-5 1911 Mon Beacon "D" Sevastopol/Odessa CW (MPI) 5153.9 MX 4-5 1911 Mon Beacon "S" Severomorsk CW (MPI) 4150 MX 4-5 1900 Mon Beacon "D" Odessa/Sevastopol CW (MPI) 8495 MX 11-5 1808 Mon Beacon "D" CW (AB) 7038.9 MX 12-5 1934 Tue Beacon "D" CW (AB) 7038.7 MX 12-5	7602	M89	29-5 1	.515	Fri	V DKG6 (x3) DE 3A7D (x2) //3642	CW	(JPL)
6666 M89 29-5 1518 Fri ip, III = U473 ND5D AT54 DAU7 6NT3 57AT U364 (Cont'd) AR CW (JPL) 6840 M89 29-5 1520 Fri VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //4860 CW (JPL) 4860 M89 29-5 1520 Fri VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //4860 CW (JPL) 4860 M89 30-5 1128 Sat M8IF DE RISP RISP CW (ARB) 5153.7 MX 4-5 1911 Mon Beacon "D" Sevastopol/Odessa CW (MPJ) 5153.9 MX 4-5 1911 Mon Beacon "D" Geesa/Sevastopol CW (AB 4150 MX 1-5 1808 Mon Beacon "S" CW (AB 7038.7 MX 1-5 1934 Tue Beacon "S" CW (AB 7038.7 MX 1-5 1934 Tue Beacon "S" CW (AB 7038.8 MX 1-5 1934 <t< td=""><td>3642</td><td>M89</td><td>29-5 1</td><td>.515</td><td>Fri</td><td>V DKG6 (x3) DE 3A7D (x2) //7602</td><td>CW</td><td>(JPL)</td></t<>	3642	M89	29-5 1	.515	Fri	V DKG6 (x3) DE 3A7D (x2) //7602	CW	(JPL)
6840 M89 29-5 1520 Fri VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //4860 CW (JPL) 4860 M89 29-5 1520 Fri VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //6840 CW (ARB) 8060 M89 30-5 1128 Sat MBJ MBJF MBJF DE RISP RISP CW (ARB) 81513.7 MX 4-5 1911 Mon Beacon "0" Sevastopol/Odesa CW (MPJ) 5153.9 MX 4-5 1912 Mon Beacon "0" CW (AB) 4150 MX 4-5 2000 Mon Beacon "0" CW (MPJ) 4894.7 MX 11-5 1807 Mon Beacon "0" Moscow CW (MPJ) 7038.9 MX 12-5 1934 Tue Beacon "0" CW (AB) 738.9 MX 12-5 1934 Tue Beacon "0" CW (AB) 8495 MX 12-5 1934 Tue Beacon "0"	5644	M89	29-5 1	.517	Fri	V DKSL (x3) DE ALSK (x2)	CW	(JPL)
4860 M89 29-5 1520 Fri VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //6840 CW (JPL) 8060 M89 30-5 1128 Sat MBJF MBJF DER ISS RIS9 CW (MPJ) 5153.7 MX 4-5 1911 Mon Beacon "D" Severstopol/Odessa CW (MPJ) 4150 MX 4-5 1912 Mon Beacon "D" Godessa/Sevastopol CW (MPJ) 8494.7 MX 11-5 1808 Mon Beacon "D" Godessa/Sevastopol CW (MPJ) 8495.7 MX 12-5 1934 Tue Beacon "S" CW (AB) 7038.7 MX 12-5 1934 Tue Beacon "S" CW (AB) 7038.7 MX 12-5 1934 Tue Beacon "S" CW (AB) 4150 MX 12-5 1934 Tue Beacon "C" CW (AB) 4593.8 MX 12-5 1934 Tue Beacon "C" <td< td=""><td>6666</td><td>M89</td><td>29-5 1</td><td>.518</td><td>Fri</td><td>i.p. III = U473 ND5D AT54 DAU7 6NT3 57AT U364 (Cont'd) AR</td><td>CW</td><td>(JPL)</td></td<>	6666	M89	29-5 1	.518	Fri	i.p. III = U473 ND5D AT54 DAU7 6NT3 57AT U364 (Cont'd) AR	CW	(JPL)
8060 M89 30-5 1128 Sat MSIF MBJF MBJF DR RISS PR RISS CW (ARB) 5153.7 MX 4-5 1911 Mon Beacon "D" Sevastopol/Odessa CW (MPJ) 5153.7 MX 4-5 1912 Mon Beacon "D" Geassa/Sevastopol CW (ARB) 4849.7 MX 11-5 1808 Mon Beacon "D" Godessa/Sevastopol CW (MPJ) 849.7 MX 11-5 1808 Mon Beacon "C" Moscow CW (ARB) 7038.9 MX 12-5 1934 Tue Beacon "C" Moscow CW (ARB) 7038.9 MX 12-5 1934 Tue Beacon "C" CW (ARB) 7038.9 MX 12-5 1934 Tue Beacon "D" CW (ARB) 7039.8 MX 12-5 1934 Tue Beacon "C" CW (ARB) 8494.7 MX 12-5 1936 Tue Beacon "C" CW	6840	M89	29-5 1	.520	Fri	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //4860	CW	(JPL)
5153.7 MX 4.5 1911 Mon Beacon "D" Sevastopol/Odessa CW (MPJ) 5153.9 MX 4.5 1912 Mon Beacon "S" Severomorsk CW (MPJ) 4150 MX 4.5 2000 Mon Beacon "D" Odessa/Sevastopol CW (MPJ) 8494.7 MX 11.5 1808 Mon Beacon "D" Odessa/Sevastopol CW (MPJ) 7038.9 MX 11.5 1808 Mon Beacon "S" CW (AB) 7038.7 MX 12.5 1934 Tue Beacon "S" CW (AB) 7038.7 MX 12.5 1934 Tue Beacon "S" CW (AB) 7038.7 MX 12.5 1934 Tue Beacon "D" CW (AB) 8159.8 MX 12.5 1934 Tue Beacon "C" CW (AB) 8494.7 MX 12.5 1936 Tue Beacon "C" CW (AB)	4860	M89	29-5 1	.520	Fri	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //6840	CW	(JPL)
5153.9 MX 4-5 1912 Mon Beacon "S" Severomorsk CW (MPI) 4150 MX 4-5 2000 Mon Beacon "V" CW (AB) 8494.7 MX 11-5 1807 Mon Beacon "C" Moscow CW (MPI) 8495.7 MX 11-5 1808 Mon Beacon "C" Moscow CW (AB) 7038.7 MX 12-5 1934 Tue Beacon "D" CW (AB) 7038.7 MX 12-5 1934 Tue Beacon "D" CW (AB) 4150 MX 12-5 1934 Tue Beacon "D" CW (AB) 3593.8 MX 12-5 1934 Tue Beacon "C" CW (AB) 4895 MX 12-5 1936 Tue Beacon "C" CW (AB) 8494.7 MX 12-5 1936 Tue Beacon "C" CW (AB) 5153.7 <td< td=""><td>8060</td><td>M89</td><td>30-5 1</td><td>.128</td><td>Sat</td><td>M8JF M8JF M8JF DE RIS9 RIS9</td><td>CW</td><td>(AtB)</td></td<>	8060	M89	30-5 1	.128	Sat	M8JF M8JF M8JF DE RIS9 RIS9	CW	(AtB)
4150 MX 4-5 2000 Mon Beacon "V" CW (AB) 8494.7 MX 11-5 1807 Mon Beacon "D" Odessa/Sevastopol CW (MPJ) 8495 MX 11-5 1808 Mon Beacon "C" Moscow CW (MB) 7038.9 MX 12-5 1934 Tue Beacon "S" CW (AB) 7038.9 MX 12-5 1934 Tue Beacon "D" CW (AB) 7038.9 MX 12-5 1934 Tue Beacon "D" CW (AB) 4150 MX 12-5 1934 Tue Beacon "D" CW (AB) 7039 MX 12-5 1936 Tue Beacon "C" CW (AB) 8494.7 MX 12-5 1936 Tue Beacon "D" CW (AB) 1515.8 MX 12-5 1938 Tue Beacon "D" CW (AB) 1525.1 MX	5153.7	MX	4-5 1	911	Mon	Beacon "D" Sevastopol/Odessa	CW	(MPJ)
8494.7 MX 11-5 1807 Mon Beacon "D" Odessa/Sevastopol CW (MPJ) 8495 MX 11-5 1808 Mon Beacon "C" Moscow CW (AB) 7038-9 MX 12-5 1934 Tue Beacon "S" CW (AB) 7038.7 MX 12-5 1934 Tue Beacon "D" CW (AB) 4150 MX 12-5 1934 Tue Beacon "D" CW (AB) 7038.9 MX 12-5 1934 Tue Beacon "D" CW (AB) 4150 MX 12-5 1934 Tue Beacon "C" CW (AB) 8495 MX 12-5 1936 Tue Beacon "C" CW (AB) 8494.7 MX 12-5 1936 Tue Beacon "C" CW (AB) 153.7 MX 12-5 1938 Tue Beacon "C" CW (AB) 153.8 MX<	5153.9	MX	4-5 1	.912	Mon	Beacon "S" Severomorsk	CW	(MPJ)
8495 MX 11-5 1808 Mon Beacon "C" Moscow CW (MPJ) 7038.9 MX 12-5 1934 Tue Beacon "S" CW (AB) 7038.7 MX 12-5 1934 Tue Beacon "D" CW (AB) 4150 MX 12-5 1934 Tue Beacon "V" CW (AB) 3593.8 MX 12-5 1934 Tue Beacon "P" CW (AB) 7039 MX 12-5 1936 Tue Beacon "C" CW (AB) 8495.7 MX 12-5 1936 Tue Beacon "C" CW (AB) 1987.9 MX 12-5 1936 Tue Beacon "C" CW (AB) 1987.0 MX 12-5 1936 Tue Beacon "C" CW (AB) 1513.7 MX 12-5 1938 Tue Beacon "D" CW (AB) 13528.4 MX	4150	MX	4-5 2	2000	Mon	Beacon "V"	CW	(AB)
7038.9 MX 12-5 1934 Tue Beacon "S" CW (AB) 7038.7 MX 12-5 1934 Tue Beacon "D" CW (AB) 4150 MX 12-5 1934 Tue Beacon "V" CW (AB) 3593.8 MX 12-5 1934 Tue Beacon "C" CW (AB) 7039 MX 12-5 1936 Tue Beacon "C" CW (AB) 8495 MX 12-5 1936 Tue Beacon "C" CW (AB) 8494.7 MX 12-5 1936 Tue Beacon "C" CW (AB) 10872 MX 12-5 1936 Tue Beacon "C" CW (AB) 5153.7 MX 12-5 1936 Tue Beacon "C" CW (AB) 5153.8 MX 12-5 1938 Tue Beacon "C" CW (AB) 13528.4 MX 12-5<	8494.7	MX	11-5 1	.807	Mon	Beacon "D" Odessa/Sevastopol	CW	(MPJ)
7038.7 MX 12-5 1934 Tue Beacon "D" CW (AB) 4150 MX 12-5 1934 Tue Beacon "V" CW (AB) 3593.8 MX 12-5 1934 Tue Beacon "P" CW (AB) 7039 MX 12-5 1936 Tue Beacon "C" CW (AB) 8495 MX 12-5 1936 Tue Beacon "C" CW (AB) 8494.7 MX 12-5 1936 Tue Beacon "D" CW (AB) 10872 MX 12-5 1936 Tue Beacon "C" CW (AB) 1515.7 MX 12-5 1938 Tue Beacon "D" CW (AB) 1515.8 MX 12-5 1938 Tue Beacon "D" CW (AB) 13528.4 MX 12-5 1938 Tue Beacon "M" CW (AB) 13527.7 MX 12-5	8495	MX	11-5 1	.808	Mon	Beacon "C" Moscow	CW	(MPJ)
4150 MX 12-5 1934 Tue Beacon "V" CW (AB) 3593.8 MX 12-5 1934 Tue Beacon "P" CW (AB) 7039 MX 12-5 1936 Tue Beacon "C" CW (AB) 8495 MX 12-5 1936 Tue Beacon "C" CW (AB) 8494.7 MX 12-5 1936 Tue Beacon "D" CW (AB) 10872 MX 12-5 1936 Tue Beacon "C" CW (AB) 1515.3.7 MX 12-5 1938 Tue Beacon "D" CW (AB) 1528.8 MX 12-5 1938 Tue Beacon "D" CW (AB) 13528.4 MX 12-5 1938 Tue Beacon "M" CW (AB) 13527.7 MX 12-5 1938 Tue Beacon "D" CW (AB) 13527.7 MX 1	7038.9	MX	12-5 1	.934	Tue	Beacon "S"	CW	(AB)
3593.8 MX 12-5 1934 Tue Beacon "P" CW (AB) 7039 MX 12-5 1936 Tue Beacon "C" CW (AB) 8495 MX 12-5 1936 Tue Beacon "C" CW (AB) 8494.7 MX 12-5 1936 Tue Beacon "C" CW (AB) 10872 MX 12-5 1936 Tue Beacon "C" CW (AB) 5153.7 MX 12-5 1938 Tue Beacon "D" CW (AB) 13528 MX 12-5 1938 Tue Beacon "C" CW (AB) 13528.4 MX 12-5 1938 Tue Beacon "M" CW (AB) 16331.7 MX 12-5 1938 Tue Beacon "D" CW (AB) 15527.7 MX 12-5 1938 Tue Beacon "D" CW (AB) 16332 MX 17-	7038.7	MX	12-5 1	.934	Tue	Beacon "D"	CW	(AB)
7039 MX 12-5 1936 Tue Beacon "C" CW (AB) 8495 MX 12-5 1936 Tue Beacon "C" CW (AB) 8494.7 MX 12-5 1936 Tue Beacon "D" CW (AB) 10872 MX 12-5 1936 Tue Beacon "C" CW (AB) 5153.7 MX 12-5 1938 Tue Beacon "D" CW (AB) 5153.8 MX 12-5 1938 Tue Beacon "P" CW (AB) 13528 MX 12-5 1938 Tue Beacon "C" CW (AB) 13528.4 MX 12-5 1938 Tue Beacon "C" CW (AB) 16331.7 MX 12-5 1938 Tue Beacon "D" CW (AB) 15527.7 MX 12-5 1938 Tue Beacon "D" CW (AB) 16331.9 MX 1	4150	MX	12-5 1	.934	Tue	Beacon "V"	CW	(AB)
7039 MX 12-5 1936 Tue Beacon "C" CW (AB) 8495 MX 12-5 1936 Tue Beacon "C" CW (AB) 8494.7 MX 12-5 1936 Tue Beacon "D" CW (AB) 10872 MX 12-5 1936 Tue Beacon "C" CW (AB) 5153.7 MX 12-5 1938 Tue Beacon "D" CW (AB) 5153.8 MX 12-5 1938 Tue Beacon "P" CW (AB) 13528 MX 12-5 1938 Tue Beacon "C" CW (AB) 13528.4 MX 12-5 1938 Tue Beacon "C" CW (AB) 16331.7 MX 12-5 1938 Tue Beacon "D" CW (AB) 15527.7 MX 12-5 1938 Tue Beacon "D" CW (AB) 16331.9 MX 1	3593.8	MX	12-5 1	.934	Tue	Beacon "P"	CW	(AB)
8494.7 MX 12-5 1936 Tue Beacon "D" CW (AB) 10872 MX 12-5 1936 Tue Beacon "C" CW (AB) 5153.7 MX 12-5 1938 Tue Beacon "D" CW (AB) 5153.8 MX 12-5 1938 Tue Beacon "P" CW (AB) 13528 MX 12-5 1938 Tue Beacon "C" CW (AB) 13528.4 MX 12-5 1938 Tue Beacon "M" CW (AB) 16331.7 MX 12-5 1938 Tue Beacon "D" CW (AB) 1527.7 MX 12-5 1938 Tue Beacon "D" CW (AB) 3593.8 MX 15-5 1954 Fri Beacon "P" Kaliningrad CW (AB) 16331.9 MX 17-5 2111 Sun Beacon "S" Sevoromorsk CW (comp) 5153.7	7039	MX	12-5 1	.936	Tue	Beacon "C"	CW	
10872 MX 12-5 1936 Tue Beacon "C" CW (AB) 5153.7 MX 12-5 1938 Tue Beacon "D" CW (AB) 5153.8 MX 12-5 1938 Tue Beacon "P" CW (AB) 13528 MX 12-5 1938 Tue Beacon "C" CW (AB) 13528.4 MX 12-5 1938 Tue Beacon "M" CW (AB) 16331.7 MX 12-5 1938 Tue Beacon "D" CW (AB) 13527.7 MX 12-5 1938 Tue Beacon "D" CW (AB) 13527.7 MX 12-5 1938 Tue Beacon "D" CW (AB) 1532.8 MX 15-5 1954 Fri Beacon "P" Kaliningrad CW (Comp) 16331.9 MX 17-5 2113 Sun Beacon "S" Sevoromorsk CW (comp) 5153.7	8495	MX	12-5 1	.936	Tue	Beacon "C"	CW	(AB)
10872 MX 12-5 1936 Tue Beacon "C" CW (AB) 5153.7 MX 12-5 1938 Tue Beacon "D" CW (AB) 5153.8 MX 12-5 1938 Tue Beacon "P" CW (AB) 13528 MX 12-5 1938 Tue Beacon "C" CW (AB) 13528.4 MX 12-5 1938 Tue Beacon "M" CW (AB) 16331.7 MX 12-5 1938 Tue Beacon "D" CW (AB) 1527.7 MX 12-5 1938 Tue Beacon "D" CW (AB) 13527.7 MX 12-5 1938 Tue Beacon "D" CW (AB) 1532.8 MX 15-5 1954 Fri Beacon "P" Kaliningrad CW (Comp) 16331.9 MX 17-5 2113 Sun Beacon "P" Kaliningrad CW (Comp) 5153.7	8494.7	MX	12-5 1	.936	Tue	Beacon "D"	CW	(AB)
5153.8 MX 12-5 1938 Tue Beacon "P" CW (AB) 13528 MX 12-5 1938 Tue Beacon "C" CW (AB) 13528.4 MX 12-5 1938 Tue Beacon "M" CW (AB) 16331.7 MX 12-5 1938 Tue Beacon "D" CW (AB) 13527.7 MX 12-5 1938 Tue Beacon "D" CW (AB) 3593.8 MX 15-5 1954 Fri Beacon "P" Kaliningrad CW (AB) 16332 MX 17-5 2107 Sun Beacon "C" Moscow CW (comp) 16331.9 MX 17-5 2111 Sun Beacon "S" Sevoromorsk CW (comp) 16331.8 MX 17-5 2113 Sun Beacon "P" Kaliningrad CW (comp) 5153.7 MX 18-5 1920 Mon Beacon "D" Odessa/Sevastopol CW (MPJ)	10872	MX			Tue	Beacon "C"	CW	(AB)
13528 MX 12-5 1938 Tue Beacon "C" CW (AB) 13528.4 MX 12-5 1938 Tue Beacon "M" CW (AB) 16331.7 MX 12-5 1938 Tue Beacon "D" CW (AB) 13527.7 MX 12-5 1938 Tue Beacon "D" CW (AB) 3593.8 MX 15-5 1954 Fri Beacon "P" Kaliningrad CW (AB) 16332 MX 17-5 2107 Sun Beacon "C" Moscow CW (comp) 16331.9 MX 17-5 2111 Sun Beacon "S" Sevoromorsk CW (comp) 16331.8 MX 17-5 2113 Sun Beacon "P" Kaliningrad CW (comp) 5153.7 MX 18-5 1920 Mon Beacon "D" Odessa/Sevastopol CW (MPJ) 7508,7 MX 21-5 1413 Thu Beacon "D" Sevastopol CW (W	5153.7	MX	12-5 1	.938	Tue	Beacon "D"	CW	(AB)
13528 MX 12-5 1938 Tue Beacon "C" CW (AB) 13528.4 MX 12-5 1938 Tue Beacon "M" CW (AB) 16331.7 MX 12-5 1938 Tue Beacon "D" CW (AB) 13527.7 MX 12-5 1938 Tue Beacon "D" CW (AB) 3593.8 MX 15-5 1954 Fri Beacon "P" Kaliningrad CW (AB) 16332 MX 17-5 2107 Sun Beacon "C" Moscow CW (comp) 16331.9 MX 17-5 2111 Sun Beacon "S" Sevoromorsk CW (comp) 16331.8 MX 17-5 2113 Sun Beacon "P" Kaliningrad CW (comp) 5153.7 MX 18-5 1920 Mon Beacon "D" Odessa/Sevastopol CW (MPJ) 7508,7 MX 21-5 1413 Thu Beacon "D" Sevastopol CW (W	5153.8	MX	12-5 1	.938	Tue	Beacon "P"	CW	(AB)
13528.4 MX 12-5 1938 Tue Beacon "M" CW (AB) 16331.7 MX 12-5 1938 Tue Beacon "D" CW (AB) 13527.7 MX 12-5 1938 Tue Beacon "D" CW (AB) 3593.8 MX 15-5 1954 Fri Beacon "P" Kaliningrad CW (AB) 16332 MX 17-5 2107 Sun Beacon "C" Moscow CW (comp) 16331.9 MX 17-5 2111 Sun Beacon "S" Sevoromorsk CW (comp) 16331.8 MX 17-5 2113 Sun Beacon "P" Kaliningrad CW (comp) 5153.7 MX 18-5 1920 Mon Beacon "D" Odessa/Sevastopol CW (MPJ) 7508,7 MX 21-5 1413 Thu Beacon "D" Sevastopol CW (WP3)	13528	MX			Tue	Beacon "C"	CW	
16331.7 MX 12-5 1938 Tue Beacon "D" CW (AB) 13527.7 MX 12-5 1938 Tue Beacon "D" CW (AB) 3593.8 MX 15-5 1954 Fri Beacon "P" Kaliningrad CW (AB) 16332 MX 17-5 2107 Sun Beacon "C" Moscow CW (comp) 16331.9 MX 17-5 2111 Sun Beacon "S" Sevoromorsk CW (comp) 16331.8 MX 17-5 2113 Sun Beacon "P" Kaliningrad CW (comp) 5153.7 MX 18-5 1920 Mon Beacon "D" Odessa/Sevastopol CW (MPJ) 7508,7 MX 21-5 1413 Thu Beacon "D" Sevastopol CW (WP3)	13528.4	MX	12-5 1	.938	Tue	Beacon "M"	CW	
13527.7 MX 12-5 1938 Tue Beacon "D" CW (AB) 3593.8 MX 15-5 1954 Fri Beacon "P" Kaliningrad CW (AB) 16332 MX 17-5 2107 Sun Beacon "C" Moscow CW (comp) 16331.9 MX 17-5 2111 Sun Beacon "S" Sevoromorsk CW (comp) 16331.8 MX 17-5 2113 Sun Beacon "P" Kaliningrad CW (comp) 5153.7 MX 18-5 1920 Mon Beacon "D" Odessa/Sevastopol CW (MPJ) 7508,7 MX 21-5 1413 Thu Beacon "D" Sevastopol CW (WP3)	16331.7	MX	12-5 1	.938	Tue	Beacon "D"	CW	
3593.8 MX 15-5 1954 Fri Beacon "P" Kaliningrad CW (AB) 16332 MX 17-5 2107 Sun Beacon "C" Moscow CW (comp) 16331.9 MX 17-5 2111 Sun Beacon "S" Sevoromorsk CW (comp) 16331.8 MX 17-5 2113 Sun Beacon "P" Kaliningrad CW (comp) 5153.7 MX 18-5 1920 Mon Beacon "D" Odessa/Sevastopol CW (MPJ) 7508,7 MX 21-5 1413 Thu Beacon "D" Sevastopol CW (WP3)	13527.7	MX			Tue	Beacon "D"	CW	
16332 MX 17-5 2107 Sun Beacon "C" Moscow CW (comp) 16331.9 MX 17-5 2111 Sun Beacon "S" Sevoromorsk CW (comp) 16331.8 MX 17-5 2113 Sun Beacon "P" Kaliningrad CW (comp) 5153.7 MX 18-5 1920 Mon Beacon "D" Odessa/Sevastopol CW (MPJ) 7508,7 MX 21-5 1413 Thu Beacon "D" Sevastopol CW (WP3)	3593.8	MX			Fri	Beacon "P" Kaliningrad	CW	
16331.8 MX 17-5 2113 Sun Beacon "P" Kaliningrad CW (comp) 5153.7 MX 18-5 1920 Mon Beacon "D" Odessa/Sevastopol CW (MPJ) 7508,7 MX 21-5 1413 Thu Beacon "D" Sevastopol CW (WP3)	16332	MX	17-5 2	107	Sun	Beacon "C" Moscow	CW	(comp)
16331.8 MX 17-5 2113 Sun Beacon "P" Kaliningrad CW (comp) 5153.7 MX 18-5 1920 Mon Beacon "D" Odessa/Sevastopol CW (MPJ) 7508,7 MX 21-5 1413 Thu Beacon "D" Sevastopol CW (WP3)	16331.9	MX	17-5 2	111	Sun	Beacon "S" Sevoromorsk	CW	(comp)
5153.7 MX 18-5 1920 Mon Beacon "D" Odessa/Sevastopol CW (MPJ) 7508,7 MX 21-5 1413 Thu Beacon "D" Sevastopol CW (WP3)			17-5 2	113	Sun		CW	(comp)
7508,7 MX 21-5 1413 Thu Beacon "D" Sevastopol CW (WP3)	5153.7	MX			Mon		CW	
						·		
· · · · · · · · · · · · · · · · · · ·								
7508.9 MX 21-5 2040 Thu Beacon "S" Sevoromorsk (new freq) CW (AB)								
7509 MX 21-5 2040 Thu Beacon "C" Moscow (new freq) CW (AB)						*		
7508.7 MX 30-5 1741 Sat Beacon "D" Sevastopol CW (AB)						· · ·		
16331.7 MX 31-5 1439 Sun Beacon "D" Odessa/Sevastopol CW (AB)								
16331.9 MX 31-5 1440 Sun Beacon "S" Severomorsk CW (AB)						·		
14575 POL 1-5 0655 Fri 0684 0684 0684 0684 0684 0000 00000 00000 00000 00000 00000 FSK 100/625 (AB)								
00000 00000 00000 00000 00000 00000 0000	2.3,3	. 31	130				. 5 200, 023	v,

_							
Freq.	Code	Date	UTC	Day	Remarks	Mode	Ctrb
14575	POL	1-5	0700	Fri	0684 0684 0684 0684 0684 00000 00000 00000 00000 00000 00000 0000	FSK 100/625	(AB)
7727	POL	7-5	1305	Thu	0437 0437 0437 0437 0437 00000 00000 00000 00000 00000 00000 0000	FSK 100/625	(AB)
7727	POL	7-5	1310	Thu	$0437\ 0437\ 0437\ 0437\ 0437\ 00000\ 00000\ 00000\ 00000\ 00000\ 00000\ 00000\ 00000$	FSK 100/625	(AB)
13537	POL	8-5	0530	Fri	0453 0453 0453 0453 0453 00000 00000 00000 00000 00000 00000 0000	FSK 100/625	(AB)
13537	POL	8-5	0535	Fri	0453 0453 0453 0453 0453 00000 00000 00000 00000 00000 00000 0000	FSK 100/625	(AB)
14575	POL	8-5	0655	Fri	0684 0684 0684 0684 0684 0000 00000 00000 00000 00000 00000 0000	FSK 100/625	(AB)
14575	POL	8-5	0700	Fri	0684 0684 0684 0684 0684 00000 00000 00000 00000 00000 00000 0000	FSK 100/625	(AB)
8423	POL	8-5	0900	Fri	0554 0554 0554 0554 0554 88888 88888 74863 97273 77630 21186 75431 98454 88888 88888 00041 00041	FSK 100/625	(AB)
8423	POL	8-5	0905	Fri	0554 0554 0554 0554 0554 88888 88888 74863 97273 77630 21186 75431 98454 88888 88888 00041 00041	FSK 100/625	(AB)
12067	POL	8-5	1005	Fri	0675 0675 0675 0675 0675 00000 00000 00000 00000 00000 00000 0000	FSK 100/625	(AB)
12067	POL	8-5	1010	Fri	0675 0675 0675 0675 0675 00000 00000 00000 00000 00000 00000 0000	FSK 100/625	(AB)
14972	POL	10-5	1405	Sun	Polish intel.	FSK 100/625	(AB)
14972	POL		1410	Sun	Polish intel.	FSK 100/625	(AB)
6480	POL		0800	Mon	0434 8888 88888 28914 59105 49804 34178 19986 75793 88888 88888 00034	•	(AB)
					00034	•	
6480	POL		0805	Mon	0434 88888 88888 28914 59105 49804 34178 19986 75793 88888 88888 00034 00034	•	(AB)
13424	POL		0845	Mon	0353 0353 0353 0353 0353 00000 00000 00000 00000 00000 00000 0000		(AB)
13424	POL	11-5	0850	Mon	0353 0353 0353 0353 0353 00000 00000 00000 00000 00000 00000 0000	•	(AB)
7837	POL	11-5	1305	Mon	0547 88888 8888 60598 81989 68883 75429 68665 81216 66765 11742 88888 8888 00041 00041	FSK 100/625	(AB)
7837	POL	11-5	1310	Mon	0547 88888 8888 60598 81989 68883 75429 68665 81216 66765 11742 88888 8888 00041 00041	FSK 100/625	(AB)
13470	POL	12-5	0630	Tue	0574 88888 88888 28713 87884 83956 59976 73714 99837 61724 88888 88888 00036 00036	FSK 100/625	(AB)
13470	POL	12-5	0635	Tue	0574 88888 88888 28713 87884 83956 59976 73714 99837 61724 88888 88888 00036 00036	FSK 100/625	(AB)
13537	POL	13-5	0530	Wed	$0453\ 0453\ 0453\ 0453\ 0453\ 00000\ 00000\ 00000\ 00000\ 00000\ 00000\ 00000\ 00000$	FSK 100/625	(AB)
13537	POL	13-5	0535	Wed	$0453\ 0453\ 0453\ 0453\ 0453\ 00000\ 00000\ 00000\ 00000\ 00000\ 00000\ 00000$	FSK 100/625	(AB)
13424	POL	13-5	0845	Wed	$0353\ 0353\ 0353\ 0353\ 0353\ 00000\ 00000\ 00000\ 00000\ 00000\ 00000\ 00000$	FSK 100/625	(AB)
13424	POL	13-5	0850	Wed	$0353\ 0353\ 0353\ 0353\ 0353\ 00000\ 00000\ 00000\ 00000\ 00000\ 00000\ 00000$	FSK 100/625	(AB)
7837	POL	13-5	1305	Wed	0547 88888 88888 60598 81989 11742 88888 88888 00041 00041	FSK 100/625	(AB)
7837	POL	13-5	1310	Wed	0547 88888 88888 60598 81989 11742 88888 88888 00041 00041	FSK 100/625	(AB)
8456	POL	13-5	1610	Wed	Polish intel.	FSK 100/625	(BW3)
13470	POL		0630	Thu	0574 88888 8888 28713 87884 83956 73714 99837 61724 88888 88888 00036 00036		(AB)
13470	POL	14-5	0635	Thu	0574 88888 8888 28713 87884 83956 73714 99837 61724 88888 88888 00036 00036	FSK 100/625	(AB)
14940	POL	14-5	0730	Thu	0433 0433 0433 0433 0433 00000 00000 00000 00000 00000 00000 0000	FSK 100/625	(AB)
14940	POL	14-5	0735	Thu	0433 0433 0433 0433 0433 00000 00000 00000 00000 00000 00000 0000	FSK 100/625	(AB)
16388	POL	14-5	1000	Thu	0765 0765 0765 0765 0765 00000 00000 00000 00000 00000 00000 0000	FSK 100/625	(AB)
16388	POL	14-5	1005	Thu	0765 0765 0765 0765 0765 00000 00000 00000 00000 00000 00000 0000	FSK 100/625	(AB)
16005	POL	14-5	1140	Thu	0217 0217 0217 0217 00000 00000 00000 00000 00000 00000 0000	FSK 100/625	(AB)
14575	POL	15-5	0655	Fri	0684 0684 0684 0684 0684 0000 00000 00000 00000 00000 00000 0000	FSK 100/625	(AB)
					00000 00000		

Fuee	Cada	Data LITC	Dev	Damania	Mada	Churk
Freq.	Code	Date UTC	Day	Remarks	Mode	Ctrb
14575	POL	15-5 0700	Fri	0684 0684 0684 0684 0684 00000 00000 00000 00000 00000 00000 0000	FSK 100/625	(AB)
8423	POL	15-5 0900	Fri	0554 0554 0554 0554 0554 00000 00000 00000 00000 00000 00000 0000	FSK 100/625	(AB)
8423	POL	15-5 0905	Fri	0554 0554 0554 0554 0554 00000 00000 00000 00000 00000 00000 0000	FSK 100/625	(AB)
12067	POL	15-5 1005	Fri	0675 88888 88888 73090 56443 50245 56243 48947 14453 88888 88888 00042 00042	FSK 100/625	(AB)
12067	POL	15-5 1010	Fri	0675 88888 88888 73090 56443 50245 56243 48947 14453 88888 88888 00042 00042	FSK 100/625	(AB)
14072	DOI.	15 5 1405	Cri.	Polish intel.	ESV 100/62E	(AD)
14972 7727	POL	15-5 1405 17-5 1305	Fri Sun	0437 0437 0437 0437 00000 00000 00000 00000 00000 00000 0000	FSK 100/625 FSK 100/625	(AB)
7727	POL	17-5 1310	Sun	0437 0437 0437 0437 0437 00000 00000 00000 00000 00000 00000 0000	FSK 100/625	(AB)
13046	POL	18-5 0815	Mon	0446 0446 0446 0446 0446 0000 00000 00000 00000 00000 00000 0000	FSK 100/625	(AB)
13046	POL	18-5 0820	Mon	0446 0446 0446 0446 0446 0000 00000 00000 00000 00000 00000 0000	FSK 100/625	(AB)
13424	POL	18-5 0850	Mon	0353 0353 0353 0353 00000 00000 00000 00000 00000 00000 0000	FSK 100/625	(AB)
13424	POL	18-5 0855	Mon	0353 0353 0353 0353 00000 00000 00000 00000 00000 00000 0000	FSK 100/625	(AB)
16388	POL	18-5 1000	Mon	0765 0765 0765 0765 0765 00000 00000 00000 00000 00000 00000 0000	FSK 100/625	(AB)
16388	POL	18-5 1005	Mon	0765 0765 0765 0765 0765 00000 00000 00000 00000 00000 00000 0000	FSK 100/625	(AB)
7837	POL	18-5 1305	Mon	0547 0547 0547 0547 00000 00000 00000 00000 00000 00000 0000	FSK 100/625	(AB)
7837	POL	18-5 1310	Mon	0547 0547 0547 0547 00000 00000 00000 00000 00000 00000 0000	FSK 100/625	(AB)
14575	POL	19-5 0655	Tue	0684 0684 0684 0684 0684 0000 00000 00000 00000 00000 00000 0000	FSK 100/625	(AB)
14575	POL	19-5 0700	Tue	0684 0684 0684 0684 0684 0000 00000 00000 00000 00000 00000 0000	FSK 100/625	(AB)
14940	POL	19-5 0730	Tue	0433 0433 0433 0433 0433 00000 00000 00000 00000 00000 00000 0000	FSK 100/625	(AB)
8423	POL	19-5 0900	Tue	0554 0554 0554 0554 0554 00000 00000 00000 00000 00000 00000 0000	FSK 100/625	(AB)
8423	POL	19-5 0905	Tue	0554 0554 0554 0554 0554 00000 00000 00000 00000 00000 00000 0000	FSK 100/625	(AB)
12067	POL	19-5 1010	Tue	Polish Intel	FSK 100/625	(MPJ)
8456	POL	20-5 0300	Wed	Polish Intel	FSK 100/625	(BW3)
8456	POL	20-5 0305	Wed	Polish Intel	FSK 100/625	(BW3)
13424	POL	20-5 0845	Wed	0353 0353 0353 0353 0353 00000 00000 00000 00000 00000 00000 0000	FSK 100/625	(AB)
13424	POL	20-5 0850	Wed	0353 0353 0353 0353 0353 00000 00000 00000 00000 00000 00000 0000	FSK 100/625	(AB)
9576	POL	20-5 1030	Wed	0325 88888 88888 89086 41982 83329 56839 87323 55124 42935 88888 88888 00040 00040	FSK 100/625	(AB)
9576	POL	20-5 1035	Wed	0325 88888 88888 89086 41982 83329 56839 87323 55124 42935 88888 88888 00040 00040	FSK 100/625	(AB)
7837	POL	20-5 1305	Wed	0547 0547 0547 0547 0549 00000 00000 00000 00000 00000 00000 0000	FSK 100/625	(AB)
7837	POL	20-5 1310	Wed	0547 0547 0547 0549 00000 00000 00000 00000 00000 00000 0000	FSK 100/625	(AB)
13470	POL	21-5 0630	Thu	0574 0574 0574 0574 0574 00000 00000 00000 00000 00000 00000 0000	FSK 100/625	(AB)
13470	POL	21-5 0635	Thu	0574 0574 0574 0574 0574 00000 00000 00000 00000 00000 00000 0000	FSK 100/625	(AB)
14940	POL	21-5 0730	Thu	0433 0433 0433 0433 0433 00000 00000 00000 00000 00000 00000 0000	FSK 100/625	(AB)
14940	POL	21-5 0735	Thu	0433 0433 0433 0433 0433 00000 00000 00000 00000 00000 00000 0000	FSK 100/625	(AB)
6480	POL	21-5 0800	Thu	0434 0434 0434 0434 0434 0000 00000 00000 00000 00000 00000 0000	FSK 100/625	(AB)

_						
Freq.	Code	Date UTC	Day	Remarks	Mode	Ctrb
6480	POL	21-5 0805	Thu	0434 0434 0434 0434 0434 00000 00000 00000 00000 00000 00000 0000	FSK 100/625	(AB)
16388	POL	21-5 1000	Thu	0765 0765 0765 0765 0765 00000 00000 00000 00000 00000 00000 0000	FSK 100/625	(AB)
16388	POL	21-5 1005	Thu	0765 0765 0765 0765 0765 00000 00000 00000 00000 00000 00000 0000	FSK 100/625	(AB)
7727	POL	21-5 1305	Thu	0437 88888 88888 94181 36974 45579 56558 50536 69013 88888 88888 00042 00042	FSK 100/625	(AB)
7727	POL	21-5 1310	Thu	0437 88888 88888 94181 36974 45579 56558 50536 69013 88888 88888 00042 00042	FSK 100/625	(AB)
13537	POL	22-5 0530	Fri	0453 0453 0453 0453 0453 00000 00000 00000 00000 00000 00000 0000	FSK 100/625	(AB)
13537	POL	22-5 0535	Fri	0453 0453 0453 0453 0453 00000 00000 00000 00000 00000 00000 0000	FSK 100/625	(AB)
14575	POL	22-5 0655	Fri	0684 0684 0684 0684 0684 00000 00000 00000 00000 00000 00000 0000	FSK 100/625	(AB)
14575	POL	22-5 0700	Fri	0684 0684 0684 0684 0684 00000 00000 00000 00000 00000 00000 0000	FSK 100/625	(AB)
13046	POL	22-5 0815	Fri	0446 0446 0446 0446 0446 00000 00000 00000 00000 00000 00000 0000	FSK 100/625	(AB)
13046	POL	22-5 0820	Fri	0446 0446 0446 0446 0446 00000 00000 00000 00000 00000 00000 0000	FSK 100/625	(AB)
8423	POL	22-5 0900	Fri	0554 0554 0554 0554 0554 00000 00000 00000 00000 00000 00000 0000	FSK 100/625	(AB)
8423	POL	22-5 0905	Fri	0554 0554 0554 0554 0554 00000 00000 00000 00000 00000 00000 0000	FSK 100/625	(AB)
12067	POL	22-5 1005	Fri	0675 0675 0675 0675 0675 00000 00000 00000 00000 00000 00000 0000	FSK 100/625	(AB)
12067	POL	22-5 1010	Fri	0675 0675 0675 0675 0675 00000 00000 00000 00000 00000 00000 0000	FSK 100/625	(AB)
7727	POL	24-5 1305	Sun	0437 88888 88888 94181 36974 45579 56558 50536 69013 88888 88888 00042 00042	FSK 100/625	(AB)
7727	POL	24-5 1310	Sun	0437 88888 88888 94181 36974 45579 56558 50536 69013 88888 88888 00042 00042	FSK 100/625	(AB)
14972	POL	24-5 1405	Sun	0877 0877 0877 0877 0877 00000 0000 000	FSK 100/625	(AB)
14972	POL	24-5 1410	Sun	0877 0877 0877 0877 0877 00000 0000 000	FSK 100/625	(AB)
6480	POL	25-5 0800	Mon	0434 0434 0434 0434 0434 00000 00000 00000 00000 00000 00000 0000		(AB)
6480	POL	25-5 0805	Mon	0434 0434 0434 0434 0434 00000 00000 00000 00000 00000 00000 0000	FSK 100/625	(AB)
13046	POL	25-5 0815	Mon	0446 0446 0446 0446 0446 0000 00000 00000 00000 00000 00000 0000	FSK 100/625	(AB)
13046	POL	25-5 0820	Mon	0446 0446 0446 0446 0446 00000 00000 00000 00000 00000 00000 0000	FSK 100/625	(AB)
13424	POL	25-5 0845	Mon	0353 88888 88888 46620 37562 50386 66601 56023 24123 88888 88888 00036 00036	FSK 100/625	(AB)
13424	POL	25-5 0850	Mon	0353 88888 88888 46620 37562 50386 66601 56023 24123 88888 88888 00036 00036	FSK 100/625	(AB)
16388	POL	25-5 1000	Mon	0765 0765 0765 0765 0765 00000 00000 00000 00000 00000 00000 0000	FSK 100/625	(AB)
16388	POL	25-5 1005	Mon	0765 0765 0765 0765 0765 00000 00000 00000 00000 00000 00000 0000	FSK 100/625	(AB)
7837	POL	25-5 1305	Mon	0547 0547 0547 0547 00000 00000 00000 00000 00000 00000 0000	FSK 100/625	(AB)
7837	POL	25-5 1310	Mon	0547 0547 0547 0547 00000 00000 00000 00000 00000 00000 0000	FSK 100/625	(AB)
13470	POL	26-5 0630	Tue	0574 0574 0574 0574 0574 00000 00000 00000 00000 00000 00000 0000	FSK 100/625	(AB)
13470	POL	26-5 0635	Tue	0574 0574 0574 0574 0574 00000 00000 00000 00000 00000 00000 0000	FSK 100/625	(AB)
14575	POL	26-5 0655	Tue	0684 88888 88888 51105 05382 35713 60893 89858 63434 88888 88888 00040 00040	FSK 100/625	(AB)
14575	POL	26-5 0700	Tue	0684 88888 88888 51105 05382 35713 60893 89858 63434 88888 88888 00040 00040	FSK 100/625	(AB)
14940	POL	26-5 0730	Tue	0433 88888 88888 45264 66426 03403 09681 25954 86400 88888 88888 00036 00036	FSK 100/625	(AB)

Eroa	Code	Date UTC	Day	Remarks	Mode	Ctrb
Freq. 14940	POL	26-5 0735	Day Tue	0433 88888 88888 45264 66426 03403 09681 25954 86400 88888 88888 00036		(AB)
14340	TOL	20-3 0733	rue	00036	13K 100/023	(AD)
8423	POL	26-5 0900	Tue	0554 0554 0554 0554 0554 00000 00000 00000 00000 00000 00000 0000	FSK 100/625	(AB)
8423	POL	26-5 0905	Tue	0554 0554 0554 0554 0554 00000 00000 00000 00000 00000 00000 0000	FSK 100/625	(AB)
12067	POL	26-5 1005	Tue	0675 0675 0675 0675 0675 00000 00000 00000 00000 00000 00000 0000	FSK 100/625	(AB)
12067	POL	26-5 1010	Tue	0675 0675 0675 0675 0675 00000 00000 00000 00000 00000 00000 0000	FSK 100/625	(AB)
9576	POL	26-5 1030	Tue	0325 0325 0325 0325 0325 00000 00000 00000 00000 00000 00000 0000	FSK 100/625	(AB)
9576	POL	26-5 1035	Tue	0325 0325 0325 0325 0325 00000 00000 00000 00000 00000 00000 0000	FSK 100/625	(AB)
13537	POL	27-5 0530	Wed	0453 88888 88888 81889 34271 67033 37980 27748 82126 88888 88888 00038 00038	FSK 100/625	(AB)
13537	POL	27-5 0535	Wed	0453 88888 88888 81889 34271 67033 37980 27748 82126 88888 88888 00038 00038	FSK 100/625	(AB)
13424	POL	27-5 0845	Wed	0353 88888 88888 46620 37562 50386 66601 56023 24123 88888 88888 00036 00036	FSK 100/625	(AB)
13424	POL	27-5 0850	Wed	0353 88888 88888 46620 37562 50386 66601 56023 24123 88888 88888 00036 00036	FSK 100/625	(AB)
9576	POL	27-5 1030	Wed	0325 0325 0325 0325 0325 00000 00000 00000 00000 00000 00000 0000	FSK 100/625	(AB)
9576	POL	27-5 1035	Wed	0325 0325 0325 0325 0325 00000 00000 00000 00000 00000 00000 0000	FSK 100/625	(AB)
7837	POL	27-5 1305	Wed	0547 0547 0547 0547 0547 00000 00000 00000 00000 00000 00000 0000	FSK 100/625	(AB)
7837	POL	27-5 1310	Wed	0547 0547 0547 0547 0547 00000 00000 00000 00000 00000 00000 0000	FSK 100/625	(AB)
13537	POL	28-5 0530	Thu	0453 88888 88888 81889 34271 67033 37980 27748 82126 88888 88888 00038 00038	FSK 100/625	(AB)
13537	POL	28-5 0535	Thu	0453 88888 88888 81889 34271 67033 37980 27748 82126 88888 88888 00038 00038	FSK 100/625	(AB)
13470	POL	28-5 0630	Thu	0574 0574 0574 0574 0574 00000 00000 00000 00000 00000 00000 0000	FSK 100/625	(AB)
13470	POL	28-5 0635	Thu	0574 0574 0574 0574 0574 00000 00000 00000 00000 00000 00000 0000	FSK 100/625	(AB)
14575	POL	28-5 0655	Thu	0684 88888 88888 51105 05382 35713 60893 89858 63434 88888 88888 00040 00040	FSK 100/625	(AB)
14575	POL	28-5 0700	Thu	0684 88888 88888 51105 05382 35713 60893 89858 63434 88888 88888 00040 00040	FSK 100/625	(AB)
14940	POL	28-5 0730	Thu	0433 88888 88888 45264 66426 03403 09681 25954 86400 88888 88888 00036 00036	FSK 100/625	(AB)
14940	POL	28-5 0735	Thu	0433 88888 88888 45264 66426 03403 09681 25954 86400 88888 88888 00036 00036	FSK 100/625	(AB)
6480	POL	28-5 0800	Thu	0434 0434 0434 0434 0434 00000 00000 00000 00000 00000 00000 0000	FSK 100/625	(AB)
6480	POL	28-5 0805	Thu	0434 0434 0434 0434 0434 00000 00000 00000 00000 00000 00000 0000	FSK 100/625	(AB)
13046	POL	28-5 0815	Thu	0446 0446 0446 0446 0446 00000 00000 00000 00000 00000 00000 0000	FSK 100/625	(AB)
13046	POL	28-5 0820	Thu	0446 0446 0446 0446 0446 00000 00000 00000 00000 00000 00000 0000	FSK 100/625	(AB)
8423	POL	28-5 0900	Thu	0554 0554 0554 0554 0554 00000 00000 00000 00000 00000 00000 0000	FSK 100/625	(AB)
8423	POL	28-5 0905	Thu	0554 0554 0554 0554 0554 00000 00000 00000 00000 00000 00000 0000	FSK 100/625	(AB)
16388	POL	28-5 1000	Thu	0765 0765 0765 0765 0765 00000 00000 00000 00000 00000 00000 0000	FSK 100/625	(AB)
12067	POL	28-5 1005	Thu	0675 0675 0675 0675 0675 00000 00000 00000 00000 00000 00000 0000	FSK 100/625	(AB)
16388	POL	28-5 1005	Thu	0765 0765 0765 0765 0765 00000 00000 00000 00000 00000 00000 0000	FSK 100/625	(AB)
12067	POL	28-5 1010	Thu	0675 0675 0675 0675 0675 00000 00000 00000 00000 00000 00000 0000	FSK 100/625	(AB)
7727	POL	28-5 1305	Thu	0437 0437 0437 0437 0437 00000 00000 00000 00000 00000 00000 0000	FSK 100/625	(AB)
				C1		

Freq.	Code	Date UTC	Day	Remarks	Mode	Ctrb
7727	POL	28-5 1310	Thu	0437 0437 0437 0437 0437 00000 00000 00000 00000 00000 00000 0000	FSK 100/625	(AB)
				00000 00000		
7727	POL	31-5 1305	Sun	0437 0437 0437 0437 00000 00000 00000 00000 00000 00000 0000	FSK 100/625	(AB)
7727	POL	31-5 1310	Sun	0437 0437 0437 0437 0437 00000 00000 00000 00000 00000 00000 0000	FSK 100/625	(AB)
				00000 00000		` '
14972	POL	31-5 1405	Sun	0877 0877 0877 0877 0877 00000 00000 00000 00000 00000 00000 0000	FSK 100/625	(AB)
				00000 00000		
14972	POL	31-5 1410	Sun	0877 0877 0877 0877 0877 00000 00000 00000 00000 00000 00000 0000	FSK 100/625	(AB)
17475	S06	14-5 0835	Thu	ip	USB	(HFD)
8167	S06	16-5 1600	Sat	491 0	USB	(HFD)
7321	S06	16-5 1900	Sat	738 0	USB	(HFD)
6768	S06	16-5 2000	Sat	738 0	USB	(HFD)
15721	S06	20-5 0400	Wed	480 393 60 86380 66865 84834 79267 77773 62956 393 60 00000	USB	(AB)
15721	S06	21-5 0400	Thu	480 617 50 38351 51444 56552 29265 44011 16848 617 50 00000	USB	(AB)
15721	S06	26-5 0400	Tue	480 269 50 36381	USB	(HFD)
15721	S06	27-5 0400	Wed	480 315 60 87605 34202 97588 98468 01634 99760 315 60 00000	USB	(AB)
14736	S06	28-5 0930	Thu	842 Barely audible	USB	(AB)
6766	S06a	12-5 1500	Tue	Barely audible	AM	(BW3)
14924	S06c	21-5 1035	Thu	11201 (R) off at 1042 UTC	USB	(comp)
14924	S06c	21-5 1050	Thu	11201 (R)	USB	(comp)
7845	S06s	1-5 0600	Fri	196 805 7 38034 37823 38230 48235 38702 44520 46992 805 7 00000	USB	(AB/HFD)
9125	S06s	1-5 0610	Fri	196 805 7 38034 37823 38230 48235 38702 44520 46992 805 7 00000	USB	(AB/HFD)
10290	S06s	1-5 0930	Fri	516 829 7 34621	USB	(HFD)
9655	S06s	1-5 0940	Fri	516	USB	(HFD)
12460	S06s	2-5 1200	Sat	254 937 6 80939	USB	(HFD)
10250	S06s	2-5 1210	Sat	254	USB	(HFD)
16320	S06s	3-5 0630	Sun	524 890 6 46062 68672 97478 39685 30485 96632 890 6 00000	USB	(AB)
14875	S06s	3-5 0640	Sun	524 890 6 46062 68672 97478 39685 30485 96632 890 6 00000	USB	(AB)
8221	S06s	4-5 0830	Mon	371 582 6 40713	USB	(HFD)
9353	S06s	4-5 0840	Mon	371	USB	(HFD)
16830	S06s	4-5 0900	Mon	872 591 6 11171	USB	(HFD)
14835	S06s	4-5 0910	Mon	872	USB	(HFD)
10230	S06s	4-5 1200	Mon	831 527 6 88620	USB	(HFD)
12165	S06s	4-5 1210	Mon	831	USB	(HFD)
5430	S06s	5-5 0700	Tue	374 968 5 34621	USB	(HFD)
6780	S06s	5-5 0715	Tue	374	USB	(HFD)
7365	S06s	5-5 0730	Tue	427 538 6 39626	USB	(HFD)
12140	S06s	5-5 0740	Tue	427	USB	(HFD)
14373	S06s	5-5 0800	Tue	352 489 6 47445	USB	(HFD)
12935	S06s	5-5 0810	Tue	352	USB	(HFD)
6810	S06s	5-5 1100	Tue	754 810 6 37947	USB	(HFD)
7560	S06s	5-5 1110	Tue	754	USB	(HFD)
7744	S06s	5-5 1510	Tue	537 891 6 38436 6666	USB	(HFD)
14977	S06s	6-5 0730	Wed	745 263 8 52401 63919 92699 14600 74248 48754 65125 41879 263 8 00000	AM	(AB/HFD)
12110	S06s	6-5 0730	Wed	745 263 8 52401 63919 92699 14600 74248 48754 65125 41879 263 8 00000	AM	(AB/HFD)
9485	S06s	6-5 0820	Wed	471 250 6 46062 68672 97478 39685 30485 96632 250 6 00000	USB	(AB/HFD)
11085	S06s	6-5 0830	Wed	471	USB	(HFD)
14580	S06s	6-5 1000	Wed	729 501 6 33796 13577 74526 46647 79302 53516 501 6 00000	USB	(AB/HFD)
16020	S06s	6-5 1010	Wed	729 501 6 33796 13577 74526 46647 79302 53516 501 6 00000	USB	(AB/HFD)
12952	S06s	7-5 0900	Thu	167 840 5 88620	USB	(HFD)
13565	S06s	7-5 0910	Thu	167	USB	(HFD)
13145	S06s	7-5 1200	Thu	425 971 6 37184	USB	(HFD)
14535	S06s	7-5 1210	Thu	425	USB	(HFD)
10290	S06s	8-5 0930	Fri	516 829 7 34621 86804 13264 96693 46791 35467 33462 829 7 00000	USB	(AB)
14875	S06s	10-5 0640	Sun	524 890 6 46062 68672 97478 39685 30485 96632 890 6 00000	USB	(AB)
16380	S06s	11-5 0900	Mon	872 591 6 11171 64385 82707 06123 22536 88280 591 6 00000	USB	(AB)
14835	S06s	11-5 0910	Mon	872 591 6 11171 64385 82707 06123 22536 88280 591 6 00000	USB	(AB)
10230	S06s	11-5 1200	Mon	831 527 6 88620 58069 61732 74537 57440 10597 527 6 00000	USB	(AB)
12165	S06s	11-5 1210	Mon	831 527 6 88620 58069 61732 74537 57440 10597 527 6 00000	USB	(AB)
15945	S06s	12-5 0600	Tue	438 591 6 37184	USB	(HFD)
16945	S06s	12-5 0610	Tue	438	USB	(HFD)

Freq.	Code	Date UTC	Day	Remarks	Mode	Ctrb
12110	S06s	13-5 0730	Wed	745 263 8 52401 63919 92699 14600 74248 48754 65125 41879 263 8 00000	USB	(AB)
9485	S06s	13-5 0820	Wed	471 250 6 46062 68672 97478 39685 30485 96632 250 6 00000	USB	(AB)
11085	S06s	13-5 0830	Wed	471 250 6 46062 68672 97478 39685 30485 96632 250 6 00000	USB	(AB)
14580	S06s	13-5 1000	Wed	729 501 6 33706 13577 74526 46647 79302 53516 501 6 00000	AM	(AB)
16020	S06s	13-5 1010	Wed	729 501 6 33706 13577 74526 46647 79302 53516 501 6 00000	AM	(AB)
6844	S06s	14-5 0900	Thu	624	USB	(HFD)
12952	S06s	14-5 0900	Thu	167 840 5 88620 58069 61732 74537 57440 840 5 00000	AM	(AB)
7161	S06s	14-5 0910	Thu	624	USB	(HFD)
13565	S06s	14-5 0910	Thu	167 840 5 88620 58069 61732 74537 57440 840 5 00000	AM	(AB)
9255	S06s	14-5 0930	Thu	314 250 6 42990 33000 32968 35223 36880 84455 250 6 00000	USB	(AB/HFD)
10325	S06s	14-5 0940	Thu	314 250 6 42990 33000 32968 35223 36880 84455 250 6 00000	USB	(AB/HFD)
13145	S06s	14-5 1200	Thu	425 971 6 37184 31294 33983 83321 85246 32553 971 6 00000	USB	(AB)
14535	S06s	14-5 1210	Thu	425 971 6 37184 31294 33983 83321 85246 32553 971 6 00000	USB	(AB)
7845	S06s	15-5 0600	Fri	196 205 7 46062 68672 97478 39685 30485 96632 52401 205 7 00000	USB	(AB)
9125	S06s	15-5 0610	Fri	196 205 7 46062 68672 97478 39685 30485 96632 52401 205 7 00000	USB	(AB)
8221	S06s	18-5 0830	Mon	371 490 5 51072 38664 48339 91339 44254 490 5 00000	USB	(AB)
9353	S06s	18-5 0840	Mon	371 490 5 51072 38664 48339 91339 44254 490 5 00000	USB	(AB)
16380	S06s	18-5 0900	Mon	872 906 5 83086 62060 83138 39760 18969 906 5 00000	USB	(AB)
14835	S06s	18-5 0910	Mon	872 906 5 83086 62060 83138 39760 18969 906 5 00000	USB	(AB)
6780	S06s	19-5 0715	Tue	374 215 6 41832 41621 32774 27587 4330x xxxxx 215 6 00000	USB	(AB)
14373	S06s	19-5 0730	Tue	352 468 7 09394 76911 75155 92918 97067 58604 01438 468 7 00000	USB	(AB)
7365	S06s	19-5 0730	Tue -	427 539 6 88620 58069 61732 74537 56440 10597 539 6 00000	AM	(AB)
11655	S06s	19-5 0740	Tue	427 539 6 88620 58069 61732 74537 56440 10597 539 6 00000	AM	(AB)
12935	S06s	19-5 0740	Tue	352 468 7 09394 76911 75155 92918 97067 58604 01438 468 7 00000	USB	(AB)
12110	S06s	20-5 0730	Wed	745 203 6 35321 35211 33212 38714 36997 80321 203 6 00000	AM	(AB)
14977	S06s	20-5 0740	Wed	745 203 6 35321 35211 33212 38714 36997 80321 203 6 00000	AM	(AB)
9485	S06s	20-5 0820	Wed	471 509 6 88997 83755 89983 34084 86339 99811 509 6 00000	USB	(AB)
11085	S06s	20-5 0830	Wed	471 509 6 88997 83755 89983 34084 86339 99811 509 6 00000	USB	(AB)
15480	S06s	20-5 1000	Wed	729 584 6 35489 38352 37367 36143 43011 34283 584 6 00000	AM	(AB)
16020	S06s	20-5 1010	Wed	729 584 6 35489 38352 37367 36143 43011 34283 584 6 00000	AM	(AB)
12952	S06s	21-5 0900	Thu	Test tones at 0900z. Late start at 0902z: 624 931 5 85258 38303 48833 37437	AM	(AB)
12332	3003	213 0300	1114	55584 931 5 00000	7.1.41	(715)
13565	S06s	21-5 0910	Thu	167 Extremely noisy transmitter messed up the message	AM	(AB)
9255	S06s	21-5 0930	Thu	314 926 5 20529 80749 03752 65367 84777 926 5 00000	USB	(AB)
10325	S06s	21-5 0940	Thu	314 926 5 20529 80749 03752 65367 84777 926 5 00000	USB	(AB)
13145	S06s	21-5 1200	Thu	425 890 6 23052 93448 72465 65598 72068 80328 890 6 00000. Bad audio	AM	(AB)
14535	S06s	21-5 1200	Thu	425 890 6 23052 93448 72465 65598 72068 80328 890 6 00000. Bad audio	AM	(AB)
						· ,
10290	S06s	22-5 0920	Fri	516 243 7 31900 48366 36534 32840 48436 81480 30762 243 7 00000. Again with mega feedback	AM	(AB)
0655	coca	22 5 0020	F=:	•	A N 4	(AD)
9655	S06s	22-5 0930	Fri	516 243 7 31900 48366 36534 32840 48436 81480 30762 243 7 00000. Again with mega feedback	AIVI	(AB)
16320	S06s	24-5 0630	Sun	524 870 6 94289 15244 21541 56567 48850 68791 870 6 00000	USB	(AB)
14875	S06s	24-5 0640	Sun	524 870 6 94289 15244 21541 56567 48850 68791 870 6 00000	USB	(AB)
8221	S06s	25-5 0830	Mon	371 490 5 51072 38664 48339 91339 44254 490 5 00000	USB	(AB)
9353	S06s	25-5 0840	Mon	371 490 5 51072 38664 48339 91339 44254 490 5 00000	USB	(AB)
16380	S06s	25-5 0900	Mon	872 906 5 83086 62060 83138 39760 18969 906 5 00000	USB	(AB)
14835	S06s	25-5 0910	Mon	872 906 5 83086 62060 83138 39760 18969 906 5 00000	USB	(AB)
10230	S06s	25-5 1200	Mon	831 926 5 62982 01738 62810 66385 19231 926 5 00000	USB	(AB)
12165	S06s	25-5 1210	Mon	831 926 5 62982 01738 62810 66385 19231 926 5 00000	USB	(AB)
15721	S06s	26-5 0408	Tue	i.p. 10474 31517 97718 00271 28877 66791 34077 99847 08012 25246 22919	USB	(AB)
				40885 64199 00571 68243 269 50 00000		
15945	S06s	26-5 0600	Tue	438 956 7 72916	USB	(HFD)
16945	S06s	26-5 0610	Tue	438	USB	(HFD)
7365	S06s	26-5 0730	Tue	427 539 6 88620 58069 61732 74537 56440 10597 539 6 00000	AM	(AB)
11655	S06s	26-5 0740	Tue	427 539 6 88620 58069 61732 74537 56440 10597 539 6 00000	AM	(AB)
14373	S06s	26-5 0800	Tue	352 468 7 09394 76911 75155 92918 97067 58604 41438 468 7 00000	USB	(AB)
12935	S06s	26-5 0810	Tue	352 468 7 09394 76911 75155 92918 97067 58604 41438 468 7 00000 352 468 7 09394 76911 75155 92918 97067 58604 41438 468 7 00000	USB	(AB)
11565	S06s	27-5 0530	Wed	464 219 5 44645 16330 88418 30780 88560 219 5 00000	USB	(AB)
12560	S06s	27-5 0540	Wed	464 219 5 44645 16330 88418 30780 88560 219 5 00000	USB	(AB)
12110	S06s	27-5 0730	Wed	745 203 6 35321 35211 33212 38714 36997 80321 203 6 00000	AM	(AB)
14977	S06s	27-5 0740	Wed	745 203 6 35321 35211 33212 38714 36997 80321 203 6 00000	AM	(AB)
11085	S06s	27-5 0830	Wed	471 509 6 88997 83755 89983 34084 86339 99811 509 6 00000	AM	(AB)

Freq.	Code	Date UTO	Day	Remarks	Mode	Ctrb
16020	S06s	27-5 1010) Wed	729 584 6 35489 38352 37367 36143 43011 34283 584 6 00000	USB	(AB)
12952	S06s	28-5 090) Thu	167 835 9 40680 34932 82235 33617 36923 30954 33932 33365 41334 835 9 00000	AM	(AB)
7161	S06s	28-5 0910) Thu	624 931 5 85258 38303 48833 37437 55584 931 5 00000	USB	(AB)
13565	\$06s	28-5 0910) Thu	167 835 9 40680 34932 82235 33617 36923 30954 33932 33365 41334 835 9 00000	AM	(AB)
9255	S06s	28-5 0930) Thu	314 926 5 20529 80749 03752 65367 84777 926 5 00000	USB	(AB)
10290	S06s	28-5 0930) Thu	516 516 516 00000	USB	(AB)
9655	S06s	28-5 0940) Thu	516 516 516 00000	USB	(AB)
10325	S06s	28-5 0940) Thu	314 926 5 20529 80749 03752 65367 84777 926 5 00000	USB	(AB)
13145	S06s	28-5 1200) Thu	425 890 6 23052 93448 72465 65598 72068 80328 890 6 00000	AM	(AB)
14535	S06s	28-5 121) Thu	425 890 6 23052 93448 72465 65598 72068 80328 890 6 00000	AM	(AB)
14875	S06s	31-5 064) Sun	524 0	USB	(HFD)
5149	S11a	1-5 045	5 Fri	321/00	USB	(HFD)
8530	S11a	1-5 091	5 Fri	484/00	USB	(HFD)
11581	S11a	1-5 1020) Fri	426/00	USB	(AB/HFD)
4870	S11a	1-5 195	5 Fri	371/00	USB	(AB/HFD)
16530	S11a	4-5 101	5 Mon	475/00	USB	(AB)
16530	S11a	7-5 101	5 Thu	476/30 85768	USB	(HFD)
8530	S11a	8-5 091	5 Fri	484/37 Vnimanie 74863 97273 77630 21186 75431 98454 Vnimanie, rpt msg, konec	USB	(AB)
11581	S11a	8-5 1020) Fri	426/00	USB	(AB)
4870	S11a	8-5 195	5 Fri	371/00	USB	(AB)
8530	S11a	15-5 091	5 Fri	484/00	USB	(AB)
11581	S11a	15-5 1020) Fri	424/38 Vnimanie 73090 56443 50245 56243 48947 14453 Vnimanie, rpt msg, out	USB	(AB)
4870	S11a	15-5 195	5 Fri	372/37 Vnimanie 00763 70970 58830 45929 65966 32341 Vnimanie, rpt msg, konec	USB	(AB)
16530	S11a	18-5 101	5 Mon	475/00	USB	(AB)
16530	S11a	21-5 101	5 Thu	475/00	USB	(AB)
8530	S11a	22-5 091	5 Fri	484/00	USB	(AB)
11581	S11a	22-5 1020) Fri	426/00	USB	(AB)
16530	S11a	25-5 101	5 Mon	475/00	USB	(AB)
5149	S11a	26-5 045	5 Tue	321/00	USB	(AB)
8530	S11a	26-5 091	5 Tue	484/00	USB	(AB)
11581	S11a	26-5 1020) Tue	426/00	USB	(AB)
8530	S11a	28-5 091	5 Thu	484/00	USB	(AB)
16530	S11a	28-5 101	5 Thu	475/00	USB	(AB)
11581	S11a	28-5 1020) Thu	426/00	USB	(AB)
4870	S11a	29-5 195	5 Fri	371/00	USB	(AB)
4625	S28	4-5 1030) Mon	MDZhB 69 007 VIKING 3252 1548	USB	(Priyom)
4625	S28	4-5 103	2 Mon	MDZhB 57 512 LIKVYeMIN 9650 4388	USB	(Priyom)
4625	S28	4-5 122	L Mon	MDZhB 84 548 MIKAROZA 1933 9932	USB	(Priyom)
4625	S28	4-5 133	1 Mon	MDZhB 86 814 KIZYaK 3138 3704	USB	(Priyom)
4625	S28	7-5 130) Thu	MDZhB 67 363 NIZKIJ 0171 6479	USB	(Priyom)
4625	S28	7-5 135	3 Thu	MDZhB 21 754 ZIZIFUS 3611 6021	USB	(Priyom)
4625	S28	10-5 1349	9 Sun	MDZhB 25 844 LIZIS 2088 3770	USB	(Priyom)
4625	S28	10-5 143	1 Sun	MDZhB 01 465 KIZAR 7348 8726	USB	(Priyom)
4625	S28	11-5 113	2 Mon	MDZhB 25 271 SIZAL' 3567 7945	USB	(Priyom)
4625	S28	11-5 1350) Mon	MDZhB 72 581 SIDNOKARB 8792 8442	USB	(Priyom)
4625	S28	11-5 1539	9 Mon	MDZhB 02 002 SIDNOFYeN 3672 9843 VIDAM 6825 9341	USB	(Priyom)
4625	S28	13-5 124	L Wed	MDZhB 76 057 SIGUN 1889 2312 TIGRICA 0431 6916	USB	(Priyom)
4625	S28	13-5 124	L Wed	MDZhB 76 057 SIGUN 1889 2312 TIGRICA 0431 6916	USB	(Priyom)
4625	S28	13-5 160	7 Wed	MDZhB 60 835 BIGOVKA 3221 4908	USB	(Priyom)
4625	S28	13-5 161	7 Wed	MDZhB 60 835 BIGOVKA 3221 4908	USB	(Priyom)
4625	S28	14-5 082) Thu	MDZhB 53 632 FIGIT 0938 5499	USB	(Priyom)
4625	S28	14-5 102	3 Thu	MDZhB 36 643 MIGALKA 0182 6348	USB	(Priyom)
4625	S28	14-5 103	1 Thu	MDZhB 15 230 LIGAZ 4970 8333	USB	(Priyom)
4625	S28	14-5 1520) Thu	MDZhB 14 033 VIVAChYe 7426 9589	USB	(Priyom)
4625	S28	16-5 120	7 Sat	MDZhB 22 166 BIBIKA 5451 8953 DIASPOR 2068 1062	USB	(Priyom)
4625	S28	17-5 124	1 Sun	MDZhB 90 483 DIAPAUZA 4900 5116	USB	(Priyom)
4625	S28	20-5 141	7 Wed	MDZhB 26 051 ChIANURI 4077 2921	USB	(Priyom)

Freq.	Code	Date UTC	Day	Remarks	Mode	Ctrb
4625	S28	21-5 0734	Thu	MDZhB 67 574 DIALOMA 3052 5981	USB	(Priyom)
4625	S28	21-5 1415	Thu	MDZhB 82 725 DIAKARB 2953 5627	USB	(Priyom)
4625	S28	23-5 1643	Sat	Inaudible. Short breakdown in Kerro transmitter, Naro-Fominsk site can be heard weak	USB	(Priyom)
4625	S28	23-5 1910	Sat	Russian mil channel marker Buzzer	USB	(BW3)
4625	S28	24-5 1250	Sun	MDZhB 67 952 VIADUK 4146 6706	USB	(Priyom)
4625	S28	24-5 1337	Sun	Inaudible	USB	(Priyom)
4625	S28	28-5 1403	Thu	MDZhB 68 037 VZYaTOK 5810 7249	USB	(Priyom)
4625	S28	28-5 1458	Thu	MDZhB 87 014 AZURIJ 3711 0328	USB	(Priyom)
4625	S28	29-5 1010	Fri	MDZhB 63 493 VZRYShNIK 2205 6941	USB	(Priyom)
3756	S30	5-5 1711	Tue	VKY1 HCLF 61HZh ZBIL L7O5 V'Z' NLCE LI27 V2MZ SB7Z	USB	(Priyom)
3756	S30	6-5 1816	Wed	5FSShch 8MUO TUZR 5J7Shch DMC3 49FT C2ZA INNC ShchGJP TZLM	USB	(Priyom)
3756	S30	9-5 1823	Sat	ZhBZU 4RVZ 3VS' DKJ1 ZhD9V 42BV 81BR M7KS PMV5 L'GJ	USB	(Priyom)
5448	S30	10-5 1432	Sun	8S1Shch 37 911 STARICA 2919 6173	USB	(Priyom)
3756	S30	10-5 1751	Sun	DEAY JH'J 12CI 79AJ ShchT3O CIHS Z7PM S7ZhG Z'1B CI9V	USB	(Priyom)
5448	S30	11-5 0513	Mon	ZhSK4 HZ5T 5FSShch 8MUO TUZR 5J7Shch DMC3 49FT C2ZA INNC	USB	(Priyom)
5448	S30	11-5 1538	Mon	8S1Shch 98 972 DRUZhBA 3282 6623. This keyword was used on S32 2 days earlier	USB	(Priyom)
5448	S30	11-5 1605	Mon	ShchGJP TZLM FY5E F61N 37CN MUDR 7VNShch Zh7NZh YMA5 VTH3	USB	(Priyom)
3756	S30	11-5 1853	Mon	AGDT 'U1B OSOG BO6C F56Shch 9GSA ZhBZI 4RVZ 3VS' DKJ1	USB	(Priyom)
3756	S30	18-5 1909	Mon	M7KS PMV5 L'GJ KZI' TShchShchS VKY1 HCLF 61HZh ZBIL L7O5	USB	(Priyom)
3756	S30	19-5 1749	Tue	S7ZhG Z'1B CI9V ZhSK4 HZ5T 5FSShch TUZR 5J7Shch DMC3 49FT	USB	(Priyom)
3756	S30	21-5 1854	Thu	JH'J 12CI 79AJ ShchT3O CIHS Z7PM S7ZhG Z'1B CI9V ZhSK4	USB	(Priyom)
3756	S30	23-5 1828	Sat	53OB 78MV DEAY JH'J 12CI 79AJ ShchT3O CIHS Z7PM S7ZhG	USB	(Priyom)
5448	S30	23-5 1828	Sat	8S1Shch 04 830 PYeRDYuGA 9506 8264	USB	(Priyom)
5448	S30	24-5 1502	Sun	8S1Shch 97 292 BILOS 9757 4111	USB	(Priyom)
3756	S30	24-5 1913	Sun	YMA5 VTH3 AGDT 'U1B OSOG BO6C F56Shch 9GSA ZhBZU 4RVZ	USB	(Priyom)
3756	S30	26-5 1830	Tue	FYSE F61N Z7CN MUDR 7VNShch Zh7NZh YMA5 VTH3 AGDT 'U1B	USB	(Priyom)
3756	S30	27-5 1750	Wed	L705 V'Z' NLCE LI27 V2MZ SB7Z 'O6P Y8VM 6I2Zh 8CShchJ	USB	(Priyom)
5448	S30	28-5 0507	Thu	27Shch' N1DU 53OB 78MV DEAY JH'J 12CI 79AJ ShchT3O CIHS	USB	(Priyom)
5448	S30	28-5 1450	Thu	8S1Shch 62 847 PRYeGLYaD 9500 2358	USB	(Priyom)
7009	S32	4-5 1338	Mon	ALFA-45 98 728 MORONAL 6546 1541	USB	(Priyom)
7009	S32	5-5 0553	Tue		USB	
		6-5 1300		SLIVA-94 LANDYSh-74 STAZhER-29 ALEUT-09 ZASLONKA-27 KURGAN-40		(Priyom)
7009	S32		Wed Thu	STOROZh-62 NYeVKA-26 KARTA-11 UTYOS-94 KOVBOJ-39	USB	(Priyom)
7009	S32	7-5 1312		ALFA-45 34 009 RUTIL 2122 2042		(Priyom)
7009	S32	7-5 1332	Thu	STOROZh-62 NYeVKA-26 KARTA-11 UTYOS-94 KOVBOJ-39 KURGAN-40	USB	(Priyom)
7009	S32	8-5 1156	Fri	ALFA-45 18 626 PARALIK 5591 0976	USB	(Priyom)
7009	S32	9-5 0914	Sat	RUZh'E-26 BIZON-64 PYeSOChNYJ-21 ShULER-60 PENZA-07 DUBLYOR-68	USB	(Priyom)
7009	S32	9-5 1148	Sat	ALFA-45 29 277 GNIL'YE 5354 3357	USB	(Priyom)
7009	S32	9-5 1157	Sat	ALFA-45 07 406 DRUZhBA 9117 5566	USB	(Priyom)
7009	S32	9-5 1404	Sat	SLIVA-94 LANDYSh-74 STAZhER-29 ALEUT-09 KURGAN-40 ZASLONKA-27	USB	(Priyom)
7009	S32	10-5 0924	Sun	RUZh'E-26 BIZON-64 PYeSOChNYJ-21 ShULER-60 PENZA-07	USB	(Priyom)
7009	S32	10-5 1225	Sun	ALFA-45 16 450 OTRYEPKI 2400 6663	USB	(Priyom)
7009	S32	10-5 1328	Sun	KURGAN-40 DUBLYOR-68 STUPA-32	USB	(Priyom)
7009	S32	10-5 1352	Sun	ALFA-45 51 300 ATTYa 1811 4298	USB	(Priyom)
7009	S32	10-5 1440	Sun	ALFA-45 61 770 RASIST 5377 3519	USB	(Priyom)
7009 3828	S32 S32	10-5 1602 10-5 1846	Sun	STOROZh-62 NYeVKA-26 KARTA-11 UTYOS-94 KOVBOJ-39 SLIVA-94 LANDYSh-74 STAZhER-29 ALEUT-09 ZASLONKA-27 ROSA-64 DZhIGIT-46	USB	(Priyom) (Priyom)
7000	can	11 5 0544	N46:-	OTPOR-89 YaHTA-94 FONTAN-34	LICD	(Drivom)
7009	S32	11-5 0544	Mon	SLIVA-94 LANDYSh-74 STAZhER-29 ALEUT-09 KURGAN-40 ZASLONKA-27	USB	(Priyom)
7009	S32	11-5 1221	Mon	ALFA 45 03 189 HINOLIN 9179 0974	USB	(Priyom)
7009	S32	11-5 1352	Mon	ALFA-45 46 301 POPIRANIYE 3912 8925	USB	(Priyom)
7009	S32	11-5 1357	Mon	RUZh'E-26 BIZON-64 PYeSOChNYJ-21 ShULER-60 PENZA-07 DUBLYOR-68	USB	(Priyom)
7009	S32	11-5 1544	Mon	ALFA-45 24 014 OFTAL'MIYa 5957 8488	USB	(Priyom)
7009	S32	12-5 0945	Tue	ROSA-64 DZhIGIT-46 OTPOR-89 YaHTA-94 FONTAN-34	USB	(Priyom)
7009	S32	13-5 0933	Wed	SLIVA-94 LANDYSh-74 STAZhER-29 ALEUT-09 ZASLONKA-27 DUBLYOR-68	USB	(Priyom)
7009	S32	13-5 1248	Wed	ALFA-45 39 886 HABUR 4946 1555	USB	(Priyom)
7009	S32	14-5 0829	Thu	ALFA-45 87 662 STODOLA 8887 4579	USB	(Priyom)
7009	S32	14-5 0854	Thu	ROSA-64 DZhIGIT-46 OTPOR-89 YaHTA-94 FONTAN-34	USB	(Priyom)
7009	S32	15-5 1458	Fri	ALFA-45 29 036 TINAKSIT 5466 3211	USB	(Priyom)
7009	S32	15-5 1529	Fri	ROSA-64 DZhIGIT-46 OTPOR-89 YaHTA-94 FONTAN-34	USB	(Priyom)
7009	S32	15-5 1703	Fri	SLIVA-94 LANDYSh-74 STAZhER-29 ALEUT-09 ZASLONKA-27	USB	(Priyom)

Eroa	Codo	Date UTC	Day	Domarks	Modo	Ctrb	
Freq. 3828	Code S32	15-5 1935	Day Fri	Remarks DVGCOCHAIVE 21 CHILLED GO DENIZA OZ DLIZNIE 26 KUDCANI 40 DUDLIVAD GO STUDA	Mode		
3828	332	15-5 1935	FII	PYeSOChNYJ-21 ShULER-60 PENZA-07 RUZh'E-26 KURGAN-40 DUBLYOR-68 STUPA- USB (Priyom) 32			
7009	S32	17-5 1246	Sun	ALFA-45 51 352 TYeLYeSNYJ 0620 7396	USB	(Priyom)	
7009	S32	18-5 0835	Mon	STOROZh-62 NYeVKA-26 KARTA-11 UTYoS-94 KOVBOJ-39	USB	(Priyom)	
7009	S32	18-5 1226	Mon	SLIVA-94 LANDYSh-74 STAZhER-29 ALEUT-09 ZASLONKA-27	USB	(Priyom)	
7009	S32	18-5 1447	Mon	ALFA-45 48 462 LOMShchiK 4429 7778	USB	(Priyom)	
3828	S32	18-5 2009	Mon	ALFA-45 89 032 MARKATO 0834 3797	USB	(Priyom)	
3828	S32	18-5 2019	Mon	ALFA-45 06 641 LUAPULA 4171 8134	USB	(Priyom)	
3828	S32	18-5 2029	Mon	ALFA-45 87 858 KOZONOK 8168 2189	USB	(Priyom)	
3828	S32	18-5 2049	Mon	ROSA-64 DZhIGIT-46 OTPOR-89 YaHTA-94 FONTAN-34 KURGAN-40 DUBLYOR-68	USB	(Priyom)	
3020	332	10 3 20 13	141011	STUPA-32	035	(i i i yom)	
7009	S32	19-5 0557	Tue	ROSA-64 DZhIGIT-46 OTPOR-89 YaHTA-94 FONTAN-34 STUPA-32	USB	(Priyom)	
7009	S32	19-5 0923	Tue	RUZh'E-26 BIZON-64 PYeSOChNYJ-21 ShULER-60 PENZA-07 DUBLYoR-68	USB	(Priyom)	
7009	S32	19-5 1206	Tue	ALFA-45 59 501 DITOKS 8292 2200	USB	(Priyom)	
7009	S32	19-5 1302	Tue	SLIVA-94 LANDYSh-74 STAZhER-29 ALEUT-09 ZASLONKA-27 KURGAN-40	USB	(Priyom)	
7009	S32	19-5 1313	Tue	ALFA-45 48 123 STRUKTURA 0616 2294	USB	(Priyom)	
7009	S32	20-5 0633	Wed	ALFA-45 79 130 BARAKChAN 4562 6658	USB	(Priyom)	
7009	S32	20-5 0804	Wed	ALFA-45 31 037 KALYaGA 7924 4538	USB	(Priyom)	
7009	S32	20-5 0812	Wed	ALFA-45 95 402 BILYeJ 6896 6249	USB	(Priyom)	
7009	S32	20-5 1334	Wed	RUZh'E-26 BIZON-64 PYeSOChNYJ-21 ShULER-60 PENZA-07	USB	(Priyom)	
7009	S32	20-5 1426	Wed	ALFA-45 55 524 KOSTOLOMKA 1859 1623	USB	(Priyom)	
7009	S32	20-5 1506	Wed	ALFA-45 89 086 LIZIMAHIYa 9487 2386	USB	(Priyom)	
3828	S32	20-5 1902	Wed	STOROZh-62 NYeVKA-26 KARTA-11 UTYoS-94 KOVBOJ-39	USB	(Priyom)	
7009	S32	21-5 0548	Thu	SLIVA-94 LANDYSh-74 STAZhER-29 ALEUT-09 ZASLONKA-27 KURGAN-40	USB	(Priyom)	
7009	S32	21-5 0732	Thu	ALFA-45 78 184 LAKIROVShchIK 8497 7768	USB	(Priyom)	
7009	S32	21-5 0736	Thu	ALFA-45 76 637 VITAL'FA 8286 2177	USB	(Priyom)	
7009	S32	21-5 1407	Thu	ALFA-45 89 270 OBLUPA 0235 6395	USB	(Priyom)	
7009	S32	21-5 1414	Thu	ROSA-64 DZhIGIT-46 OTPOR-89 YaHTA-94 FONTAN-34 STUPA-32	USB	(Priyom)	
7009	S32	21-5 1752	Thu	ALFA-45 78 038 SFYeROID 6229 5811	USB	(Priyom)	
7009	S32	22-5 0753	Fri	ALFA-45 94 577 KURIYa 3215 4545	USB	(Priyom)	
7009	S32	22-5 0837	Fri	RUZh'E-26 BIZON-64 PYeSOChNYJ-21 ShULER-60 PENZA-07 DUBLYOR-68	USB	(Priyom)	
7009	S32	22-5 0857	Fri	ALFA-45 77 276 MILOS 5048 4644	USB	(Priyom)	
7009	S32	22-5 1114	Fri	ALFA-45 83 026 POLUMYeTAL 7171 5653	USB	(Priyom)	
7009	S32	22-5 1907	Fri	STOROZh-62 NYeVKA-26 KARTA-11 UTYOS-94 KOVBOJ-39 KURGAN-40 SLIVA-94	USB	(Priyom)	
7005	332	22-3 1307		LANDYSh-74 STAZhER-29 ALEUT-09 ZASLONKA-27	OJD	(Friyoni)	
7009	S32	23-5 1025	Sat	ALFA-45 53 527 BAJKALIYa 0187 6322	USB	(Priyom)	
7009	S32	23-5 1209	Sat	ALFA-45 01 448 IZMENShchIK 8241 3683	USB	(Priyom)	
7009	S32	23-5 1248	Sat	YaHTA-94 FONTAN-34 STUPA-32 RUZh'E-26 BIZON-64 PYeSOChNYJ-21 ShULER-60	USB	(Priyom)	
				PENZA-07 DUBLYoR-68		` , ,	
7009	S32	23-5 1505	Sat	ALFA-45 57 974 HUNGARA 9038 3532	USB	(Priyom)	
7009	S32	23-5 1624	Sat	ALFA-45 71 372 PARABYeL' 4546 9337	USB	(Priyom)	
7009	S32	24-5 1254	Sun	ALFA-45 62 687 KAGLYSAL 6074 6179	USB	(Priyom)	
7009	S32	24-5 1409	Sun	LANDYSh-74 NYeVKA-26 DZhIGIT-46 PYeSOChNYJ-21 KURGAN-40	USB	(Priyom)	
7009	S32	25-5 0531	Mon	ALEUT-09 UTYoS-94 KOVBOJ-39 YaHTA-94 PENZA-07 FONTAN-34 ZASLONKA-27	USB	(Priyom)	
7009	S32	25-5 1000	Mon	STUPA-32 STAZhER-29 KARTA-11 OTPOR-89 ShULER-60 DUBLYOR-68 LANDYSh-74	USB	(Priyom)	
7009	S32	25-5 1026	Mon	LANDYSh-74 NYeVKA-26 DZhIGIT-46 PYeSOChNYJ-21 KURGAN-40	USB	(Priyom)	
3828	S32	26-5 1025	Tue	ALEUT-09 UTYoS-94 KOVBOJ-39 YaHTA-94 PYeNZA-07 STAZhER-29 KARTA-11 OT-	USB	(Priyom)	
				POR-89 ShULER-60 DUBLYOR-68			
7009	S32	26-5 1325	Tue	SLIVA-94 STOROZh-62 ROSA-64 RUZh'E-26 BIZON-64	USB	(Priyom)	
7009	S32	27-5 0733	Wed	STAZhER-29 KARTA-11 OTPOR-89 ShULER-60 DUBLYOR-68 ZASLONKA-27 STUPA-32	USB	(Priyom)	
				FONTAN-34			
3828	S32	27-5 1844	Wed	LANDYSh-74 NYeVKA-26 DZhIGIT-46 PYeSOChNYJ-21 KURGAN-40 SLIVA-94 RUZh'E-	- USB	(Priyom)	
		00 - 11-1		26		(5)	
7009	S32	28-5 1406	Thu	ALFA-45 83 566 OBOYuDNYJ 4655 4189	USB	(Priyom)	
7009	S32	28-5 1504	Thu	ALFA-45 90 819 BOTROLIT 4786 3286	USB	(Priyom)	
7009	S32	28-5 1629	Thu	STAZHER-29 KARTA-11 OTPOR-89 SHULER-60 DUBLYOR-68 FONTAN-34 LANDYSh-	USB	(Priyom)	
F 470	622	20 5 4525	- 1.	74 NYEVKA-26 DZhIGIT-46 PYESOChNYJ-21 KURGAN-40	LICD	/p	
5473	S32	28-5 1629	Thu	STAZhER-29 KARTA-11 OTPOR-89 ShULER-60 DUBLYOR-68 FONTAN-34 LANDYSh-74 NYeVKA-26 DZhIGIT-46 PYeSOChNYJ-21 KURGAN-40	USB	(Priyom)	
7009	S32	29-5 1117	Fri	LANDYSh-74 NYeVKA-26 DZhIGIT-46 PYeSOChNYJ-21 KURGAN-40 SLIVA-94 RUZh'E-	LISR	(Priyom)	
7009	332	25-3 111/	ΓΠ	LANDYSh-74 NYEVKA-26 DZNIGIT-46 PYESOCHNYJ-21 KURGAN-40 SLIVA-94 ROZN E- 26	030	(FTIYOHI)	
5473	S32	29-5 1816	Fri	ALFA-45 91 391 FYELLO 7908 2372	USB	(Priyom)	
7009	S32	29-5 1816	Fri	ALFA-45 91 391 FYELLO 7908 2372	USB	(Priyom)	
,005	JJ2	25 5 1010		NEW 43 31 331 1000 / 300 / 23/ 2	JJD	(i riyoni)	

Freq.	Code	Date UT	C Day	Remarks	Mode	Ctrb
7009	S32	30-5 104	•	ALFA-45 10 245 BISYeRShchIK 1918 1574	USB	(Priyom)
5292	S5292	4-5 195		Buzzer-marker	USB	(AB)
5292	S5292	12-5 193		Buzzer-marker	USB	(AB)
5292	S5292	19-5 075		FAZAN-37 67 482 RAZGON 2819 5839	USB	(Priyom)
5292	S5292	22-5 133		FAZAN-37 36 982 BIOLOG 4326 9675	USB	(Priyom)
3580	UM01	1-5 100		CQ P 9	CW	(JPL-Sib)
3580	UM01	1-5 204		CQ P 6 (Transitioning between 5 and 6)	CW	(JPL-Sib)
3580	UM01	1-5 204		CQ P 5	CW	(JPL-Sib)
3580	UM01	2-5 014		CQP6	CW	(JPL-Sib)
3580	UM01	2-5 021		CQ P 7	CW	(JPL-Sib)
3580	UM01	3-5 105		CQ P 12	CW	(JPL-Sib)
3580	UM01	3-5 112		CQ P 11	CW	(JPL-Sib)
3580	UM01	3-5 135		CQ P 11	CW	(JPL-Sib)
3580	UM01	3-5 193		CQP6	CW	(JPL-Sib)
3580	UM01	3-5 215		CQP5	CW	(JPL-Sib)
3580	UM01	3-5 234		CQ P 5	CW	(JPL-Sib)
3580	UM01	4-5 023		CQ P 8	CW	(JPL-Sib)
3580	UM01	4-5 123		CQ P 15	CW	(JPL-Sib)
3580	UM01	4-5 133		CQ P 15	CW	(JPL-Sib)
3580	UM01	4-5 204		CQ P 10	CW	(JPL-Sib)
3580	UM01	5-5 005		CQP9	CW	(JPL-Sib)
3580	UM01	5-5 010		CQ P 10	CW	(JPL-Sib)
3580	UM01	8-5 094		CQ P 16	CW	(JPL-Sib)
3580	UM01	8-5 134		CQ P 17	CW	(JPL-Sib)
3580	UM01	8-5 141		CQ P 16	CW	(JPL-Sib)
3580	UM01	9-5 210		CQ P 17	CW	(JPL-Sib)
3580	UM01	10-5 012		CQ P 17	CW	(JPL-Sib)
3580	UM01	12-5 095		CQ P 13	CW	(JPL-Sib)
3580	UM01	17-5 124		CQ P 19	CW	(JPL-Sib)
3580	UM01	17-5 131		CQ P 18	CW	(JPL-Sib)
3580	UM01	17-5 161		CQ P 18	CW	(JPL-Sib)
3580	UM01	17-5 195		CQ P 17	CW	(JPL-Sib)
3580	UM01	18-5 154		CQ P 16	CW	(JPL-Sib)
3580	UM01	18-5 170		CQ P 16	CW	(JPL-Sib)
3580	UM01	18-5 234		CQ P 13	CW	(JPL-Sib)
3580	UM01	19-5 154		CQ P 20	CW	(JPL-Sib)
3580	UM01	26-5 234		CQ P 12 (transitioning between 12 and 11)	CW	(JPL-Sib)
3580	UM01	26-5 234		CQ P 11	CW	(JPL-Sib)
3580	UM01	27-5 021		CQ P 13	CW	(JPL-Sib)
3314	UM10	4-5 204		Unid 10-mins net: S3DN	CW	(JPL-Sib)
4064	UM10	5-5 205		Unid 10-mins bet: NZO6 //3568 kHz	CW	(JPL-Sib)
3568	UM10	5-5 205		Unid 10-mins bet: NZO6 //4064 kHz	CW	(JPL-Sib)
3568	UM10	10-5 185		Unid 10-mins net: NZO6 //4064 kHz	CW	(JPL-Sib)
4064	UM10	10-5 185		Unid 10-mins net: NZO6 //3568 kHz	CW	(JPL-Sib)
3568	UM10	15-5 164		Unid 10-mins net: NZO6 //4064 kHz	CW	(JPL-Sib)
4064	UM10	15-5 164		Unid 10-mins net: NZO6 //3568 kHz	CW	(JPL-Sib)
3568	UM10	17-5 195		Unid 10-mins net: NZO6 //4065 kHz	CW	(JPL-Sib)
4065	UM10	17-5 195		Unid 10-mins net: NZO6 //3568 kHz	CW	(JPL-Sib)
3568	UM10	29-5 152		Unid 10-mins net: NZO6	CW	(JPL-Sib)
7554	V02a	28-5 200		YL/SS with 5FGs. Should be M08a	LSB	(DSch)
13582	V07	3-5 050		511 511 500	USB	(AB)
12182	V07	3-5 052		511 511 511 000	USB	(AB)
13582	V07	10-5 050		511 511 511 1 568 49 x2 ??5?0 9??01 43845 83430 08143 91401 000 000	USB	(Dan)
12182	V07	10-5 052		511 511 511 1 568 49 x2 ??5?0 9??01 43845 83430 08143 91401 000 000	USB	(Dan)
11182	V07	10-5 054		511 511 511 1 568 49 x2 ??5?0 9??01 43845 83430 08143 91401 000 000	USB	(Dan)
13582	V07	24-5 050		511 0	USB	(HFD)
13582	V07	24-5 050		511 511 511 000	USB	(Dan)
12182	V07	24-5 052		511 0	USB	(HFD)
12182	V07	24-5 052		511 511 511 000	USB	(Dan)
15388	V13	30-5 080		New Star	AM	(MMa)
15388	V13	31-5 070		New Star	AM	(Nico)
5637	V21	15-5 003		Cuban Babbler	USB	(AAFL)
						v: v: -/

Freq.	Code	Date	UTC	Day	Remarks	Mode	Ctrb
5715	V24		1330	Sat	S. Korean intel	AM	(SJB)
5715	V24		1330	Sun	S. Korean intel	AM	(SJB)
4900	V24		1500	Sun	S. Korean intel	AM	(SJB)
5715	V24		1328	Mon	S. Korean intel	AM	(SJB)
8046	VC01		1919	Mon	Chinese Robot	USB	(Nico)
12215	X06		1020	Fri	Mazielka. Sequence: 361245	USB	(comp/LDO)
18245	X06		0944	Sat	Mazielka. Sequence: 134265	USB	(Danix)
10438	XPA		1730	Tue	491 1 04700 00251 63234 59450 61095	MFSK-20/10Bd	(AB/HFD)
9938	XPA		1750	Tue	491 1 04700 00251 63234 59450 61095 32236 94137 84558 60353 garbled mes-	MFSK-16/20Bd	(AB/HFD)
					sage		
9138	XPA	5-5	1810	Tue	491 1 04700 00251 63234 59450 61095 raped by a radar	MFSK-16/20Bd	(AB/HFD)
10868	XPA	6-5	0600	Wed	813 1 04322 00109 61780 94438 70979 41503	MFSK-20/10Bd	(HFD)
12168	XPA	6-5	0620	Wed	813 1 04322 00109 61780 94438 70979 41503	MFSK-20/10Bd	(HFD)
13368	XPA	6-5	0640	Wed	813 1 04322 00109 61780 94438 70979 41503	MFSK-20/10Bd	(AB/HFD)
10438	XPA	7-5	1730	Thu	Barely audible	MFSK-20/10Bd	(AB)
9938	XPA	7-5	1750	Thu	Barely audible	MFSK-20/10Bd	(AB)
9138	XPA	7-5	1810	Thu	Barely audible	MFSK-20/10Bd	(AB)
10868	XPA	9-5	0600	Sat	813 1 04322 00109 61780 94438 70979 41503	MFSK-20/10Bd	(AB)
12168	XPA	9-5	0620	Sat	813 1 04322 00109 61780 94438 70979 41503	MFSK-20/10Bd	(AB)
13368	XPA	9-5	0640	Sat	813 1 04322 00109 61780 94438 70979 41503	MFSK-20/10Bd	(AB)
10438	XPA	12-5	1730	Tue	491 491 491 000 02367 00001 00000 10140	MFSK-20/10Bd	(AB)
9938	XPA	12-5	1750	Tue	491 491 491 000 02367 00001 00000 10140	MFSK-20/10Bd	(AB)
9138	XPA	12-5	1810	Tue	491 491 491 000 02367 00001 00000 10140	MFSK-20/10Bd	(AB)
13368	XPA	13-5	0600	Wed	813 813 813 000 08829 00001 00000 10140	MFSK-20/10Bd	(AB)
12168	XPA	13-5	0600	Wed	813 813 813 000 08829 00001 00000 10140	MFSK-20/10Bd	(AB)
10868	XPA	13-5	0600	Wed	813 813 813 000 08829 00001 00000 10140	MFSK-20/10Bd	(AB)
9938	XPA	14-5	1750	Thu	491 1 00370 00155 83782 15681 97725 50621	MFSK-16/20Bd	(AB/MPJ)
9138	XPA	14-5	1810	Thu	491 1 00370 00155 83782 15681 97725 50621	MFSK-16/20Bd	(AB/MPJ)
10868	XPA	16-5	0600	Sat	813 813 813 000 06339 00001 00000 10140	MFSK-20/10Bd	(AB)
12168	XPA	16-5	0620	Sat	813 813 813 000 06339 00001 00000 10140	MFSK-20/10Bd	(AB)
13368	XPA	16-5	0640	Sat	813 813 813 000 06339 00001 00000 10140	MFSK-20/10Bd	(AB)
9138	XPA	19-5	1810	Tue	491 1 00370 00155 83782 42046 73537 21463 80481 13739 08829 7695 (?)	MFSK-20/10Bd	(MPJ)
10868	XPA	20-5	0600	Wed	813 813 813 000 07804 00001 00000 10140	MFSK-20/10Bd	(AB)
12168	XPA	20-5	0620	Wed	813 813 813 000 07804 00001 00000 10140	MFSK-20/10Bd	(AB)
13368	XPA	20-5	0640	Wed	813 813 813 000 07804 00001 00000 10140	MFSK-20/10Bd	(AB)
10438	XPA		1730	Thu	491 491 491 000 09357 00001 00000 10140	MFSK-16/20Bd	(AB)
9938	XPA	21-5	1750	Thu	491 491 491 000 09357 00001 00000 10140	MFSK-16/20Bd	(AB/MPJ)
9138	XPA		1810	Thu	491 491 491 000 09357 00001 00000 10140	MFSK-16/20Bd	(AB/MPJ)
10868	XPA		0600	Sat	813 813 813 000 08697 00001 00000 10140	MFSK-120/10Bd	(AB)
12168	XPA		0620	Sat	813 813 813 000 08697 00001 00000 10140	MFSK-120/10Bd	(AB)
13368	XPA		0640	Sat	813 813 813 000 08697 00001 00000 10140	MFSK-120/10Bd	(AB)
10868	XPA		0600	Wed	813 1 01158 00133 06696 54314 30317 06371	MFSK-20/10Bd	(AB)
12168	XPA		0620	Wed	813 1 01158 00133 06696 54314 30317 06371	MFSK-20/10Bd	(AB)
13368	XPA		0640	Wed	813 1 01158 00133 06696 54314 30317 06371	MFSK-20/10Bd	(AB)
10438	XPA		1730	Thu	491 1 04660 00233 16036 91053 41429 15251	MFSK-16/20Bd	(AB)
9938	XPA		1750	Thu	491 1 04660 00233 16036 91053 41429 15251	MFSK-16/20Bd	(AB)
9138	XPA		1810	Thu	491 1 04660 00233 16036 91053 41429 15251	MFSK-16/20Bd	(AB)
10868	XPA		0600	Sat	813 1 01158 00133 06696 54314 30317 06371	MFSK-20/10Bd	(AB)
12168	XPA		0620	Sat	813 1 01158 00133 06696 54314 30317 06371	MFSK-20/10Bd	(AB)
13368	XPA		0640	Sat	813 1 01158 00133 06696 54314 30317 06371	MFSK-20/10Bd	(AB)
16314	XPA2		1500	Fri	03441 00181 45770 33428 28477 24456 42294 34541 06527 57376	MFSK-16/20Bd	(MPJ/HFD)
15814	XPA2		1520	Fri	03441 00181 45770 33428 28477 24456 42294 34541 06527 57376	MFSK-16/20Bd	(MPJ)
14514	XPA2		1540	Fri	03441 00181 45770 33428 28477 24456 42294 34541 06527 57376	MFSK-16/20Bd	(MPJ/HFD)
17462	XPA2		1900	Fri	05984 00001 00000 10140	MFSK16/20Bd	(MPJ/HFD)
16114	XPA2		1920	Fri	05984 00001 00000 10140	MFSK16/20Bd	(MPJ/HFD)
14828	XPA2		1940	Fri	05984 00001 00000 10140	MFSK16/20Bd	(AB/MPJ/HFD)
17462	XPA2		1900	Sat	01729 00001 00000 10140	MFSK-16/20Bd	(AB)
16114	XPA2		1920	Sat	01729 00001 00000 10140	MFSK-16/20Bd	(AB)
15314	XPA2		1500	Sun	04771 00001 00000 10140	MFSK-16/20Bd	(AB)
15815	XPA2		1520	Sun	04771 00001 00000 10140	MFSK-16/20Bd	(AB)
14514	XPA2		1540	Sun	04771 00001 00000 10140 Spur on 14498 kHz	MFSK-16/20Bd	(AB)
14538	XPA2	3-5	2000	Sun	06548 00001 00000 10140	MFSK-16/20Bd	(AB/MPJ/HFD)

Freq.	Code	Date UTC	Day	Remarks	Mode	Ctrb
13538	XPA2	3-5 2020	Sun	06548 00001 00000 10140	MFSK-16/20Bd	(AB/HFD)
12138	XPA2	3-5 2040	Sun	06548 00001 00000 10140	MFSK-16/20Bd	(AB/HFD)
16314	XPA2	8-5 1500	Fri	06918 00091 13082 27088 92352 14043 14605 corrupt msg	MFSK-16/20Bd	(AB)
15814	XPA2	8-5 1500	Fri	06918 00091 13082 27088 82351 14043 14605 corrupt msg	MFSK-16/20Bd	(AB/MPJ)
17462	XPA2	8-5 1920	Fri	06491 00157 51095 67067 57234 56321	MFSK-16/20Bd	(MPJ/BW3)
16114	XPA2	8-5 1900	Fri	06491 00157 51095 67067 57234 50321 06491 00157 51095 67067 57234 56321	MFSK-16/20Bd	(BW3/AB)
14828	XPA2	8-5 1920	Fri	06491 00157 51095 67067 57234 50321 06491 00157 51095 67067 57234 56321	MFSK-16/20Bd	(AB)
16314	XPA2	10-5 1500	Sun	06918 00091 13082 92352 14043 14605. Lots of errors	MFSK-16/20Bd	(AB)
14538	XPA2	10-5 1300	Sun	09071 00001 00000 10140	MFSK-16/20Bd	(AB)
13538	XPA2	10-5 2000	Sun	09071 00001 00000 10140	MFSK-16/20Bd	(AB)
12138	XPA2	10-5 2020	Sun			· · ·
12138	XPAZ	10-5 2040	Sun	Transmitter test tones a couple of minutes before the supposed start but no transmission followed	IVIF3K-10/2UBU	(AB)
14538	XPA2	12-5 2000	Tue	04884 00001 00000 10140	MFSK-16/20Bd	(AB/BW3)
13538	XPA2	12-5 2020	Tue	04884 00001 00000 10140	MFSK-16/20Bd	(AB/BW3)
12138	XPA2	12-5 2040	Tue	04884 00001 00000 10140	MFSK-16/20Bd	(AB)
16314	XPA2	15-5 1500	Fri	02947 00173 91888 59200 78064 61772 corrupt message	MFSK-16/20Bd	(AB)
15814	XPA2	15-5 1520	Fri	02947 00173 91888 59200 78064 61772 corrupt message	MFSK-16/20Bd	(AB)
14514	XPA2	15-5 1540	Fri	02947 00173 91888 59200 78064 61772 corrupt message	MFSK-16/20Bd	(AB)
17462	XPA2	15-5 1900	Fri	05572 00001 00000 10140	MFSK-16/20	(MPJ/BW3)
14828	XPA2	15-5 1940	Fri	05572 00001 00000 10140	MFSK-16/20	(MPJ)
16314	XPA2	17-5 1500	Sun	02947 00173 91888 59200 78064 61772	MFSK-16/20Bd	(AB)
15814	XPA2	17-5 1520	Sun	02947 00173 91888 59200 78064 61772	MFSK-16/20Bd	(AB)
14514	XPA2	17-5 1540	Sun	02947 00173 91888 59200 78064 61772	MFSK-16/20Bd	(AB)
14538	XPA2	17-5 2000	Sun	00752 00065 93389 22957 52246 30574	MFSK-16/20Bd	(MPJ/JNC)
12138	XPA2	17-5 2040	Sun	00752 00065 93389 22957 52246 30574	MFSK-16/20Bd	(AB)
14538	XPA2	19-5 2000	Tue	00752 00065 93389 52286 85178 24781222557 5224 3077 (end corrupt)	MFSK-16/20Bd	(MPJ)
18767	XPA2	22-5 0720	Fri	00862 00139 37995 10337 21071 35641	MFSK-16/10Bd	(AB)
17467	XPA2	22-5 0740	Fri	00862 00139 37995 10337 21071 35641	MFSK-16/10Bd	(AB)
17462	XPA2	22-5 1900	Fri	09257 00113 44899 53854 45655 57733	MFSK-16/10Bd	(AB)
16114	XPA2	22-5 1920	Fri	09257 00113 44899 53854 45655 57733	MFSK-16/10Bd	(AB)
14828	XPA2	22-5 1940	Fri	09257 00113 44899 53854 45655 57733	MFSK-16/10Bd	(AB)
17462	XPA2	23-5 1900	Sat	09257 00113 44899 53854 45655 57733	MFSK-16/10Bd	(AB)
16114	XPA2	23-5 1920	Sat	09257 00113 44899 53854 45655 57733	MFSK-16/10Bd	(AB)
14828	XPA2	23-5 1940	Sat	09257 00113 44899 53854 45655 57733	MFSK-16/10Bd	(AB/BW3)
16314	XPA2	24-5 1500	Sun	07319 00001 00000 10140	MFSK-16/10Bd	(AB/MPJ)
14514	XPA2	24-5 1540	Sun	07319 00001 00000 10140	MFSK-16/10Bd	(AB/MPJ)
14538	XPA2	24-5 2000	Sun	04378 00073 66682 70250 55570 21112	MFSK-16/20Bd	(AB/MPJ)
13538	XPA2	24-5 2020	Sun	04378 00073 66682 70250 55570 21112	MFSK-16/20Bd	(AB)
12138	XPA2	24-5 2040	Sun	04378 00073 66682 70250 55570 21112	MFSK-16/20Bd	(AB)
17467	XPA2	26-5 0740	Tue	00324 00105 22181 89776 38561 64772	MFSK-16/20Bd	(AB)
10437	XPA2	26-5 1730	Tue	i.p.	MFSK-16/20Bd	(AB)
19667	XPA2	28-5 0700	Thu	00323 00105 23181 89776 38561 64772	MFSK-16/20Bd	(AB)
18767	XPA2	28-5 0720	Thu	00323 00105 23181 89776 38561 64772	MFSK-16/20Bd	(AB)
17467	XPA2	28-5 0740	Thu	00323 00105 23181 89776 38561 64772	MFSK-16/20Bd	(AB)
16314	XPA2	29-5 1500	Fri	05875 00119 58003 30822 72078 56532	MFSK-16/20Bd	(MPJ)
15814	XPA2	29-5 1520	Fri	05875 00119 58003 30822 72078 56532	MFSK-16/20Bd	(AB)
14514	XPA2	29-5 1540	Fri	05875 00119 58003 30822 72078 56532	MFSK-16/20Bd	(AB)
17462	XPA2	29-5 1900	Fri	05493 00001 00000 10140	MFSK-16/20Bd	(AB/MPJ)
16114	XPA2	29-5 1920	Fri	05493 00001 00000 10140	MFSK-16/20Bd	(AB/MPJ)
14828	XPA2	29-5 1940	Fri	05493 00001 00000 10140	MFSK-16/20Bd	(AB/MPJ)
17462	XPA2	30-5 1900	Sat	05392 00001 00000 10140	MFSK-16/20Bd	(AB)
16114	XPA2	30-5 1920	Sat	05392 00001 00000 10140	MFSK-16/20Bd	(AB)
14828	XPA2	30-5 1940	Sat	05392 00001 00000 10140	MFSK-16/20Bd	(AB)
16314	XPA2	31-5 1500	Sun	05875 00119 58003 30822 72078 56532	MFSK-16/20Bd	(AB/MPJ)
15814	XPA2	31-5 1500	Sun	05875 00119 58003 30822 72078 50532 05875 00119 58003 30822 72078 56532	MFSK-16/20Bd	(AB)
14514	XPA2	31-5 1540	Sun	05875 00119 58003 30822 72078 50532 05875 00119 58003 30822 72078 56532	MFSK-16/20Bd	(AB)
14514	XPA2	31-5 1340	Sun	04491 00001 00000 10140	MFSK-16/20Bd	(AB)
13538	XPA2	31-5 2000	Sun	04491 00001 00000 10140	MFSK-16/20Bd	(AB)
12138	XPA2	31-5 2020	Sun	04491 00001 00000 10140	MFSK-16/20Bd	(AB)
12130	Λι Λ 4	J1-J 2040	Juli	5.152 55001 00000 101TO	1711 SK-10/ 2000	וטריו

CONTRIBUTORS

AAFL	Anthony Agnelli, FL, USA	JNC	Jace, NC, USA
AB	Ary Boender, Netherlands	JPL	JPL, Ontario, Canada
AtB	Attu Bosch, AK, USA	JPL-HK	JPL via remote rx Hong Kong
Avare	Avare	JPL-Sib	JPL via remote rx Siberia
BA2	Bruce Atchison, USA	LDO	Leif Dehio, Germany
BW3	Barry Williams, AL, USA	MPJ	Jim, SW England
comp	John compositesignals	NH2	Nige, UK
Dan	Daniel, Argentina	Nico	Nico, near Paris, France
Danix	Danix111, Poland	Priyom	Priyom.org
DSch	Don Schimmel, USA	SJB	SJ, South Korea
Eric	Eric	Tom	Tom, Lincs, UK
GHn	Gary Hagermann, UK	WP3	Wolfgang Palmberger
HFD	Hans-Friedrich Dumrese, Germany		

All information in this newsletter was submitted by independent radio monitors or has been obtained from public available sources and public sites on the web. Wherever data was obtained via the web or elsewhere, references and/or links to these sources have been noted.

Google Earth images: Copyright © Google

Portions of this newsletter may be used in electronic or printed hobby bulletins without prior approval so long as "Numbers & Oddities" is credited as the source. This newsletter may NOT be utilized, partly or wholly, in any other COMMERCIAL media format without the written permission of the Editor. Any breach of this may result in action under international copyright legislation.

Relevant mailing lists and websites:

NUMBERS & ODDITIES http://www.numbersoddities.nl

SPY NUMBERS ONLINE DATABASE http://www.spynumbers.com/numbersDB

UDXF - UTILITY DXERS FORUM http://www.udxf.nl

HF UNDERGROUND http://www.hfunderground.com/board/

PRIYOM http://priyom.org/

To become an UDXF member go to http://groups.yahoo.com/group/udxf/ and follow the instructions.

To become a Spooks member go to http://mailman.qth.net/mailman/listinfo/spooks fill in the form and follow the instructions that will be mailed to you.







